VAR DEPARTMENT TECHNICAL MANUAL

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COST ACCOUNTING

REPAIRS and UTILITIES

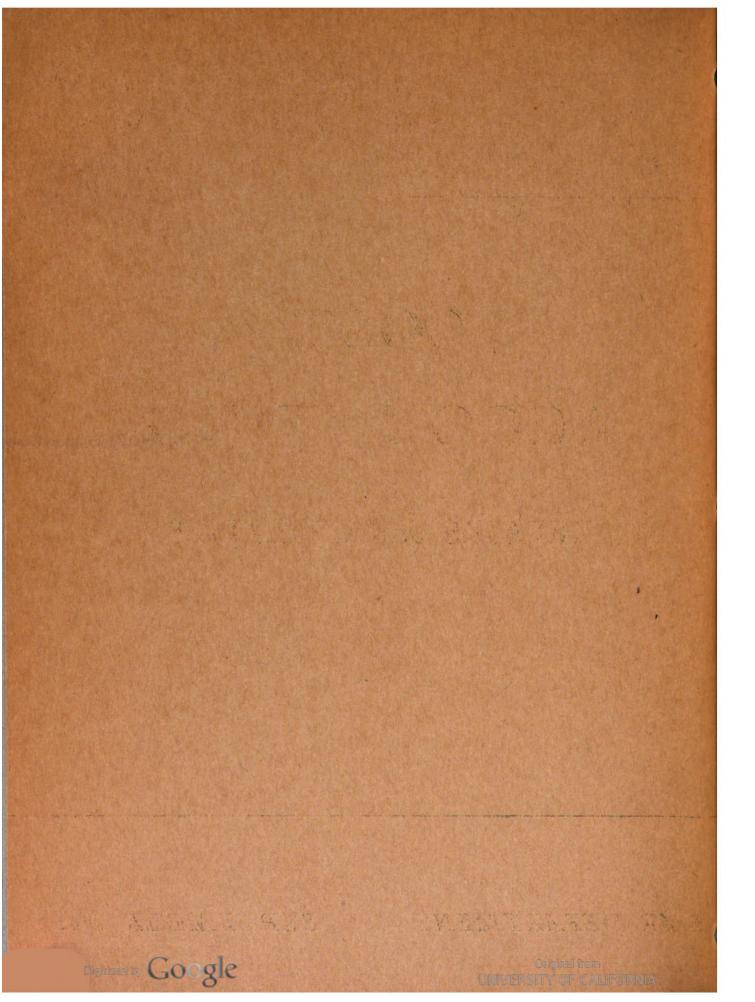


WAR DEPARTMENT

SEPTEMBER 1945

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COST ACCOUNTING

REPAIRS and UTILITIES



WAR DEPARTMENT

SEPTEMBER 1945

United States Government Printing Office
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WAR DEPARTMENT

Washington 25, D. C., 29 September 1945

TM 5-602, Cost Accounting—Repairs and Utilities, is published for the information and guidance of all concerned.

[AG 300.7 (23 Aug 45)]

By order of the Secretary of War:

OFFICIAL:

G. C. MARSHALL Chief of Staff

EDWARD F. WITSELL
Major General
Acting The Adjutant General

DISTRIBUTION:

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Refer to FM 21-6 for explanation of distribution formula.



TECHNICAL MANUAL COST ACCOUNTING REPAIRS AND UTILITIES

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Changes No. 1

and add new page 52A.

Washington 25, D. C., 1 July 1946

TM 5-602, 29 September 1945, is changed as follows:

Withdraw pages 43 through 46 and insert page 43, revised pages 44 and 45, and page 46. Withdraw pages 49 through 52 and insert page 49, revised page 50, page 51, and revised page 52,

Withdraw pages 59 and 60 and insert page 59 and revised page 60.

Withdraw pages 65 through 78 and insert page 65, and revised pages 66 through 78. [AG 300.7 (4 Jun 46)]

By order of the Secretary of War:

OFFICIAL:

EDWARD F. WITSELL Major General
The Adjutant General

DWIGHT D. EISENHOWER Chief of Staff

DISTRIBUTION:

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670-00 Post engineer office	1/1 CIT-HOULS	224



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DEBIT RECONCILIATION ACCOUNTS:		Parag ra ph
TOTAL COST THIS FISCAL YEAR TO DATE:	Base data	reference
680-10 Main post	\mathbf{None}	226
680–20 Subposts	None	227
680-30 Deleted facilities	\mathbf{None}	228
680-40 Transferred facilities	\mathbf{None}	229
PRIOR YEARS' COSTS:		
681-10 Prior years' costs—feature accounts	\mathbf{None}	230
681-20 Prior years' costs—reconciliation accounts	\mathbf{None}	231
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682-10 Expendable and class P property	\mathbf{None}	233
682-20 Accountable MR property—other than power-operated	None	234
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682-30 Accountable MR property—power-operated maintenance	None	235
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683-40 Excess property transferred	\mathbf{None}	240
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686-00 Collections	None	242
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695-00 Rentals and other revenue	None	243
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697-10 Allotments received—this fiscal year to date	None	244
697-20 Allotments received—prior fiscal years	None	245
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services		
698–20 Accounts payable—pay rolls	None	248
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TIES FUNDS:		
699-10 Costs not chargeable to post repairs and utilities funds—	Man-hours	250
labor		
699-20 Costs not chargeable to post repairs and utilities funds—	\mathbf{None}	25 1
materials and supplies		
699-30 Costs not chargeable to post repairs and utilities funds—	$\mathbf{Non}_{\mathbf{e}}$	252
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other		
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facilities received by transfer		

62. Use

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The accounts listed in paragraph 61 are prescribed for cost-accounting purposes. Code numbers are

given at the left before the title of the account. The paragraph references refer to chapter 12, where the accounts are described in detail.

CHAPTER 12

DESCRIPTION OF ACCOUNTS

Section I. BUILDINGS AND STRUCTURES

63. General

a. Included. The designation Buildings and

structures, includes the following:

(1) Permanent and temporary buildings classified according to predominant use of individual units of construction. If large industrial, storage, hospital, and similar units are also used to considerable extent for other purposes such as administration and housing, such buildings and appropriate sections thereof are classified by the responsible command.

(2) Accessory structures such as sheds, coal bins, loading platforms, ramps, porches, covered and enclosed hospital walks, and other related facilities attached to buildings. Covered and enclosed hospital walks are considered to be attached to hospital technical buildings.

(3) Utilities distribution systems inside build-

ings, as follows:

(a) Interior water lines from the building line.

b) Interior sanitary-sewer lines from the building line.

(c) Interior electric wiring from the switching

device or meter.

(d) Interior gas lines from the building line.

(e) Interior steam and hot-water distribution lines including steam unit heaters, radiators, traps, and valves from the low-pressure side of a highpressure system, or the branch main take-off at the building wall in a low-pressure system.

Note. Pressure-reducing stations, condensate and vacnum pumps, flash tanks, and condensate-receiving tanks are always excluded from building accounts (par. 150a (4)). The labor cost of general heating mechanics who instruct firemen and inspect generating and distribution heating equipment is also excluded from building accounts (par. 150a (3) (b)).

(f) Hot-air ducts and grilles outside of the furnace room, flues, smokestacks, and roof jacks.

(g) Ventilating and evaporative (desert type)

cooling systems.

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(4) That installed equipment for which the post engineer is responsible, excluding equipment referred to in paragraph 63b.

(5) Hutments, tents, wharves, and approaches, and other structures (pars. 88 through 91).

b. Excluded from buildings and structures accounts are the following:

(1) All new work as defined in chapter 10.

(2) Custodial and janitorial services (par. 198). (3) Elevator maintenance and repair (par. 199).

(4) Shop equipment (par. 221).

(5) Heating equipment (pars. 150 through 163).

(6) Ice-manufacturing, cold storage, miscellaneous refrigeration and air-conditioning equipment (pars. 164 and 165).

(7) Installed kitchen equipment (par. 184). c. Type of Construction. To reflect maintenance cost adequately, buildings accounts are

grouped as follows:

(1) Permanent buildings. 2) Cantonment type buildings.

(3) Theater-of-operations type buildings.
(4) Hutments.

(5) Tents.

Note. Buildings are identified as to type of construction in accordance with TM 5-601 (when published).

d. Type of Usage. In addition to classification by type of construction, buildings other than hutments and tents are each segregated according to building usage:

(1) Quarters. Examples:

Apartment Nurses

Civilian houses Officers quarters and Company officer

Detached, including Regimental comgarage. \mathbf{mander}

Farm houses Semidetached Field officer Warrant officers Major general

(2) Barracks. Examples:

Enlisted men Prisoner Civilian dormitories Prison guard Stable guard

Flying cadet Medical detachment

(3) Mess halls. Examples:

Enlisted men

Enlisted men's cafeteria

Flying cadet Medical detachment

Nurses

Officers

(4) Storage buildings. Examples:

Armament building Depots:

Ammunition ordnance Gasoline and oil

General supply ordnance

Depots—Continued.

Remount Signal Corps Supply

Officers and nurses

Officers and recrea-

Prisoners and guards

cafeteria

tion

Patients

Igloos Ice-storage building

Sheds

84. Account 610–35, Theater-of-Operations Type Administration Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type administration buildings on the post.

85. Account 610–36, Theater-of-Operations Type
Technical Maintenance Shops

To this account is charged the cost of maintenance and repair of all theater-of-operations type technical maintenance shops on the post.

86. Account 610–37, Theater-of-Operations Type
Hospital Technical Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type hospital technical buildings, including theater-ofoperations type covered and inclosed hospital walks, on the post.

87. Account 610—38, Theater-of-Operations Type
Miscellaneous Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type miscellaneous buildings on the post.

88. Account 610-40, Hutments

To this account is charged the cost of maintenance and repair of all hutments on the post.

89. Account 610-50, Tents

The designation *Tents* includes flooring, framework, doors, screens, and other component parts. Tent stoves and canvas are *not* included in this account. To this account is charged the cost of maintenance and repair of all tents on the post.

90. Account 610–70, Wharves and Approaches

To this account is charged the cost of maintenance and repair of all wharves and water approaches on the post.

a. Included. The designation Wharves and approaches includes wharves, sea walls, ferry slips, jetties, bulkheads, breakwaters, channels, docks, dock warehouses, causeways, and similar structures along waterways and the water approaches.

b. BASE DATA. None.

91. Account 610–90, Other Structures

To this account is charged the cost of maintenance and repair of all other structures on the post.

a. INCLUDED. The designation Other structures includes swimming pools (except water-filtration and circulation equipment) animal-watering facilities, fences, fence alarm systems, walls, gates, flag poles, detached loading platforms, ramps, coal bins, and similar structures not otherwise accounted for. This account is not to be confused with accounts 610-18, 610-28, and 610-38 prescribed to include miscellaneous buildings.

b. Base Data. None.

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Section II. GROUNDS

92. General

Grounds within the limits of the military reservation are classified as indicated in paragraph 93 through 95.

93. Account 611-10, Improved Grounds

The designation *Improved grounds* includes grounds adjacent to buildings, structures, roads, runways, and the like upon which grass is cut, leaves raked, dust and erosion control measures maintained, or on which intensive grounds maintenance is performed.

a. Included. Included in this account is the

cost of the following:

(1) Maintenance, including sodding, planting, and mulching, of grassed runways, lawns, post cemeteries (including opening and closing of graves), parade grounds, bridle paths, parkways, athletic fields, recreational areas, agricultural lands, areas on landing fields adjacent to airfield pavements, and grounds for rifle and pistol ranges. Retaining walls, levees, riprap, irrigation ditches, subsurface field drains, and open ditches, excepting those accessory to roads, railroads, wharves, parking areas, open-storage areas, walks, and areas designated as other post areas (par. 94).

(2) Mowing of all grass within the improved

area of the post.

- (3) Maintenance of agricultural lands such as hayfields, pastures, orchards, vineyards, and the like. Reseeding with annual grains, cultivating, fertilizing, spraying, pruning, and seeding of cover crops, and other practices essential to crop maintenance.
- (4) Removal of such debris as rocks and wire that interfere with grass mowing; maintenance of dust-control measures on nontraffic areas; essential spraying and pruning of trees and shrubs within improved areas.

(5) Operation of greenhouses at installations, where such work is a repairs and utilities responsibility in accordance with War Department policy.

b. Excluded. Excluded from this account are

costs of the following:

(1) Original dust and erosion control projects (par. 95).

(2) Insect and rodent-control activities on

grounds (par. 115).

(3) Cultivation and harvesting of post gardens. This is not a repairs and utilities responsibility.

(4) Snow removal and maintenance and repair

of snow fences (par. 192).

c. Base Data. Acres is the unit of measure and includes all improved areas on the post except areas covered by buildings, roads, railroads, walks, parking and open-storage areas, airfield pavements, etc.

94. Account 611-20. Other Post Areas

The designation Other post areas includes wooded areas, meadows, lakes, ponds, gullies, streams, trails, gulches, deserts, swamps, marshes, cutover timber lands, burned-over areas, shore lines, artillery ranges, maneuver areas, grounds in connection with bombing ranges, and similar areas not requiring intensive maintenance work and not included in improved grounds.

a. Included in this account is the

cost of the following:

(1) Maintenance of other post areas, including retaining walls, riprap, open ditches, irrigation ditches, and the like located in areas excluded from improved grounds and not accessory to roads, railroads, wharves, etc.

(2) Mowing of grass along roadways, railroads,

etc., located in other post areas.

(3) Maintenance of firebreaks located in other post areas.

b. Excluded from this account is the

cost of the following:

(1) Original dust and erosion control projects (par. 95).

(2) Insect and rodent control activities on grounds (par. 115).

(3) Cultivation and harvesting of post gardens.

(4) Snow removal and maintenance and repair

of snow fences (par. 192).

c. Base Data. Acres is the unit of measure and includes all areas on the post except those classified improved grounds and areas covered by buildings, roads, railroads, walks, parking and open-storage areas, airfield pavements, etc.

95. Account 611-30, Dust and Erosion Control

a. INCLUDED. Included in this account is the cost of all dust and erosion control projects on nontraffic areas until control is firmly established, including grading, leveling, terracing, seeding, mulching, oiling, graveling, and other treatments.

b. Excluded. Excluded from this account is

the cost of the following:

(1) Maintenance of completed dust and erosion control projects, chargeable to accounts 611-10 or

611-20 as applicable.

(2) Reseeding with annual grains; cultivating, fertilizing, spraying, seeding of cover crops, and other cultural practices essential to crop maintenance on agricultural lands. These operations are chargeable to account 611-10.

c. BASE DATA. None.

Section III. ROADS

96. General

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a. Included. The designation Roads includes the following:

(1) All graded, surfaced, or paved roads, streets, service drives, and alleys.

(2) Features considered incidental to roads such as shoulders, open ditches, slopes, culverts, bridges, trestles, underdrains, curbs, gutters, flumes, riprap, guardrails, retaining walls, pavement markings, traffic signals, etc.

b. Excluded from roads are the

following:

(1) Storm sewers (par. 128).

2) Snow removal, ice alleviation, and snow fences (par. 192). (3) Signs (par. 194).

(4) Mowing of grass adjacent to roads (pars. 93 and 94).

(5) Maintenance equipment (par. 221).

97. Account 612–10, Concrete Roads

To this account is charged the cost of maintenance and repair of all concrete roads on the post.

a. Included. The designation Concrete includes cement concrete, brick, block, and comparable

rigid pavements.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all concrete roads on the post as recorded on the realproperty records.

98. Account 612–21, Bituminous Roads—High Type

To this account is charged the cost of maintenance and repair of all high type bituminous roads on the post.

The designation Bituminous a. Included. roads-high type includes all hot-mix and cold plant-mix bituminous surfaces 2 inches thick or more built on rigid bases or substantial flexible bases and bituminous pavements of a comparable class of construction.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all high type bituminous roads on the post as recorded on the real-property records.

99. Account 612–22, Bituminous Roads—Low Type

To this account is charged the cost of maintenance and repair of all low type bituminous roads on the post.

a. Included. Bituminous roads—low type includes bituminous pavements other than those

included in account 612-21.

b. BASE DATA. Square yards is the unit of measure for the total surfaced area of all low type bituminous roads on the post as recorded on the real-property records.

100. Account 612–30, Miscellaneous Roads

To this account is charged the cost of maintenance and repair of all miscellaneous roads on the post.

a. Included. The designation Miscellaneous roads includes gravel, natural soil, stabilized, and roads other than those in accounts 612-10, 612-21, and 612-22.

b. Base Data. Square yards in the unit of measure and includes the entire surfaced area or the area maintained for traffic, exclusive of appurtenant shoulders, of all miscellaneous roads on the post as recorded on the real-property

Section IV. PARKING AND STORAGE AREAS AND

101. Account 612–40, Parking and Open-Storage

To this account is charged the cost of maintenance and repair of all graded, surfaced, or paved parking and open-storage areas on the post.

a. INCLUDED. The designation Parking and

open-storage areas includes the following:

(1) All graded, surfaced, or paved parking areas, open-storage areas, motor parks, and warehouse and igloo aprons (except covered or inclosed areas).

(2) Features considered incidental to parking and open-storage areas such as underdrains, curbs, gutters, guardrails, pavement markings, etc.

b. Excluded. Excluded from parking and open-

storage areas are the following:

(1) Storm sewers (par. 128).

(2) Snow removal, ice alleviation, and snow fences (par. 192). (3) Signs (par. 194).

(4) Grounds adjacent to parking and openstorage areas (par. 93).

(5) Maintenance equipment (par. 221).

c. Base Data. Square yards is the unit of measure and includes the total area of all parking and open-storage areas on the post as recorded on the real-property records.

102. Account 612-50, Walks

To this account is charged the cost of maintenance and repair of all walks on the station.

a. Included. The designation Walks includes

the following:

- (1) All graded, surfaced, paved, or duckboard walks.
- (2) Features considered incidental to walks such as stairs, handrails, footbridges, etc.
- b. Excluded from this account are the following:
- (1) Snow removal and ice alleviation (par. 192).

(2) Signs (par. 194).

(3) Grounds adjacent to walks (par. 93).

(4) Bridle paths (par. 93).

(5) Maintenance equipment (par. 221).

- (6) Covered and inclosed hospital walks (pars. 70, 78, and 86).
- c. BASE DATA. Square yards is the unit of measure and includes the total area of all walks on the post as recorded on the real-property records.

Section V. AIRFIELD PAVEMENTS

103. General

a. Included. The designation Airfield pavements includes the following:

(1) All paved, surfaced, or stabilized (other than grassed) airfield runways, taxiways, aprons,

hardstandings, and shoulders.

(2) Features considered incidental to airfield pavements such as subgrade drains, pavement markings, and delineators.

b. Excluded from airfield pavements

are the following:

(1) Storm sewers (par. 128).

(2) Snow removal, ice alleviation, and snow fences (par. 192).

(3) Signs (par. 194).

(4) Grounds adjacent to airfield pavements (par. 93).

(5) Maintenance equipment (par. 221).

104. Account 613-11, Airfield Pavements-Concrete

To this account is charged the cost of maintenance and repair of all concrete airfield pavements on

a. INCLUDED. The designation Concrete includes cement concrete and other rigid types of surface.

b. Base Data. Square yards is the unit of measure and includes the total surfaced area of all concrete airfield pavements on the post as recorded on the real-property records.

105. Account 613–12, Airfield Pavements—Bituminous—High Type

To this account is charged the cost of maintenance and repair of all high type bituminous airfield

pavements on the post.

a. Included. The designation Bituminous high type includes all hot-mix and cold plant-mix bituminous surfaces 2 inches thick or more constructed on rigid bases or substantial flexible bases and bituminous pavements of a comparable class of construction.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all high type bituminous pavements on the post as recorded on the real-property records.

106. Account 613–13, Airfield Pavements—Bituminous—Low Type

To this account is charged the cost of maintenance and repair of all low type bituminous airfield pavements on the post.

a. Included. The designation Bituminous low type includes bituminous airfield pavements other than those described in account 613-12.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all low type bituminous airfield pavements on the post as recorded on the real-property records.

107. Account 613–14, Airfield Pavements—Miscel-

To this account is charged the cost of maintenance and repair of all miscellaneous airfield pavements on the post.

The designation Miscellaneous a. INCLUDED. airfield pavements includes gravel, natural-soil, stabilized, and other types than those covered by accounts 613-11, 613-12, and 613-13.

b. Excluded from this account are grassed runways. These are included in account

611–10.

c. Base Data. Square yards is the unit of measure and includes all miscellaneous airfield pavements on the post as recorded on the real-property records.

Section VI. RAILROADS

108. Account 614-00, Railroads

To this account is charged the cost of maintenance and repair of railroads.

a. INCLUDED. The designation Railroads in-

cludes the following:

(1) All running tracks, side tracks, yard tracks, and access tracks of utility railroads owned, leased,

or controlled by the Government.

(2) Component and incidental features of railroads such as rails, rail accessories, frogs, switches, ties, ballast, roadbed, slopes, ditches, culverts, bridges, trestles, signals, etc.

b. Excluded from railroads are the

following:

(1) Narrow-gauge trackage serving fortification facilities (par. 208).

(2) Trackage for moving targets (par. 195).(3) Military railroads. These are not a re-

pairs and utilities responsibility (AR 55-650).

- (4) Railroad rolling stock and small work cars owned by the Government. Maintenance, repair, and operation of this equipment is not a repairs and utilities responsibility.
- (5) Snow removal, ice alleviation and snow fences (par. 192).
- (6) Mowing of grass adjacent to railroads (pars. 93 and 94).

(7) Signs (par. 194).(8) Maintenance equipment (par. 221).

c. Base Data. Linear feet is the unit of measure and includes the total length of railroads in terms of single track (two rails, ties, etc.) as recorded on the real-property records.

Section VII. FIRE PROTECTION

109. General

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a. Included. The designation Fire protection includes fire-fighting personnel, fire trucks, hose, ladders, chemicals, fire extinguishers, miscellaneous fire-fighting appliances, outdoor manual fire-alarm systems, fire fighting clothing and other equipment necessary for an effective fireprotection unit.

b. Excluded from fire-protection

accounts are the following:

(1) Automatic-sprinkler systems, standpipe systems, and automatic and manual fire-alarm systems installed in buildings. The maintenance and repair costs of these systems are charged to the applicable building accounts.

(2) Airplane-crash-rescue and fire-fighting trucks and equipment used as such; personnel primarily assigned to airplane-crash rescue and fire fighting or directly related activities defined as

peculiar to AAF.

(3) The cost of establishing and maintaining ground-fire lanes. This is chargeable to the appli-

cable grounds account

(4) Telephone fire-alarm systems. Maintenance of these systems is not a repairs and utilities responsibility.

- (5) Water-tank trucks normally operated for street-sprinkling and similar purposes and responding to fire calls as emergency units. Maintenance and repair costs of these units are chargeable to account 662-00.
- (6) The value of fire trucks and the equipment permanently attached thereto is retained in inventory accounts 682–20 and 682–30. When such equipment is removed from the post engineers accountability by inventory adjustment or report of survey, the original cost or valuation is debited to account 661-00. When memerandum-receipt equipment is transferred without reimbursement, the original cost or valuation is debited to account 683-40. The contra entry in either case is a credit to the applicable inventory accounts.

110. Account 615-10, Fire Personnel

To this account is charged the entire pay roll of the fire department (exception: that portion of pay roll chargeable to Account 669-00, paragraph 223), plus the cost applied to enlisted personnel and prisoners of war assigned to regular tours of duty.

a. INCLUDED. The designation Fire Personnel includes all personnel (exception, paragraph 109b (2)) assigned regular tours of duty as fire fighters and engaged in fire prevention and firefighting activities. Included in this account is the labor cost of washing, polishing, and repairing fire trucks, drying and repairing fire hose; filling and repairing fire extinguishers; when done by fire personnel during regular tours of duty.

b. Base Data. "Man hours" is the unit of measure and includes the total on-duty hours of fire

personnel. ("On-call" employees, wherein 8 hours of each 24-hour tour of duty are not to be considered as work or duty status for compensation purposes, only two-thirds of the 24-hour tour of duty, that is, 16 hours, will be considered as "on-duty" hours for fire personnel base data purposes. Excluded: sick, annual, and holiday leave taken.)

111. Account 615-20, Fire Trucks

To this account is charged the cost of maintenance and repair and operating supplies of all fire trucks (except crash trucks used as such) and the equipment permanently attached thereto.

a. Included. The designation Fire trucks in-

cludes pumpers, hook-and-ladder, chemical, brush,





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141. Account 622-50, Distribution Transformers
To this account is charged the cost of maintenance
and repair of distribution transformers.

a. Included. The designation Distribution

transformers includes the following:

(1) All constant-potential and constant-current transformers connected to and operating as a part of the overhead and underground distribution systems.

(2) All transformers installed on poles, in vaults, warehouses, manholes, on pads, etc., in-

cluding the transformer fuses.

b. Excluded. Excluded from this account are power transformers in main supply substations

(par. 142).

c. BASE DATA. KVA capacity is the unit of measure and includes the sum of the KVA ratings of all transformers operating on the distribution systems as recorded on the real-property records.

142. Account 622-60, Substations

If the serving utility owns the substation or if the post is supplied direct from the system of the serving utility without voltage transformation, no costs or base data are recorded or reported under this account. The cost of maintenance and repair of switching or regulating facilities at the point of connection is charged to the overhead, or underground distribution system as applicable. To this account is charged the cost of maintenance and repair of substations.

a. INCLUDED. The designation Substations includes those Government-maintained assemblies of transformers, regulators, switching or regulating facilities, and auxiliary equipment through which electric energy is passed for the purpose of modifying its characteristics before distribution

on the post.

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b. Excluded. Excluded from this account are transformers connected to and operating as a part of the electric distribution system (par. 141).

c. Base Data. KVA capacity is the unit of measure and includes the sum of the name plate KVA ratings of active transformers in substation. Any standby transformers in the substation are not included in the base data.

143. Account 622-70, Purchased Electric Energy

To this account is charged the cost of all electric

energy received for use on the station.

- a. INCLUDED. The designation Purchased electric energy includes all electric energy purchased under contract or by purchase orders. This account reflects the net contract price of electric energy used at the station. When deductions are made on utility bills representing recoupment of connection charges pursuant to electrical contracts, this account is charged with the net contract cost of electric energy before deducting credits for refund of connection charges.
 - b. Base Data. KWH is the unit of measure

and includes the total KWH of electric energy purchased to date in the current fiscal year for use on the station.

Section XII. GAS SYSTEMS

144. General

a. INCLUDED. The designation Gas systems includes the following:

(1) The generation of gas, such as butane and

propane.

(2) Purchased gas, including bottled gas.

(3) Distribution from points of generation or delivery to government up to the building lines

or points of utilization on the station.

(4) Plants and equipment such as gas-generating plants, access and distribution lines, regulators, valves, drips, meters, and all other appurtenances and equipment used for generation and distribution of gas.

b. Excluded from gas systems are

the following:

(1) Gas lines within buildings from the building

line (par. 63a (3)).

(2) Structural features of buildings housing gas-generating equipment (par. 63a).

145. Account 623—10, Distribution Mains and Services

To this account is charged the cost of maintenance and repair of gas-distribution mains and services.

a. INCLUDED. The designation Distribution mains and services includes the following:

(1) Government-maintained access and distribution lines.

(2) Regulators, valves, drips, meters, services, and other apparatus and equipment used for the

distribution of gas.

b. BASE DATA. Linear feet is the unit of measure and includes the total length of transmission, distribution, and access lines up to the building lines as recorded on the real-property records.

146. Gas-Generating Plants

The designation Gas-generating plants includes all appurtenances and equipment necessary to the generation of gas such as propane and butane. The accounts applicable to gas-generating plants are described in paragraphs 147 and 148.

147. Account 623–21, Gas-Generating Plants— Operation

To this account is charged the cost of operation of gas-generating plants including automatically operated plants.

a. INCLUDED. Included in this account are the

following:

(1) Salaries of personnel including supervisors, assigned to operation of gas-generating plants. If an operator is assigned to two or more plants

and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.

(2) Labor to perform first and second echelon preventive maintenance, inspection, and services.

(3) Operating supplies such as lubricants, wip-

ing rags, and the like.

b. Excluded. Excluded from this account are the following:

1) Power and fuel consumed.

(2) All elements of maintenance and repair described in paragraph 148.

c. Base Data. Therms is the unit of measure and includes the quantity of gas produced to date

in the current fiscal year.

148. Account 623–22, Gas-Generating Plants— Maintenance and Repair

To this account is charged the cost of maintenance and repair of gas-generating plants including automatically operated plants.

a. Included in this account are the

following:

(1) Materials and repair parts used to effect all

echelons of repairs.

(2) Labor for third and higher echelons of maintenance and repair when done by other than operator attendants during their operation shift.

(3) Replacement of defective units of equip-

ment with comparable units.

- b. Excluded from this account are all elements of operation described in paragraph
- c. Base Data. Therms is the unit of measure and includes the quantity of gas produced to date in the current fiscal year.

149. Account 623–30, Purchased Gas

To this account is charged the cost of all gas

purchased for use on the station.

- a. Included. The designation Purchased gas includes all gas purchased such as natural, manufactured, mixed and liquified petroleum gas, and bottled gas. This account reflects the net contract price of purchased gas used at the station (par. 30). When deductions are made on utilities bills representing recoupment of connection charges pursuant to gas contracts, this account is charged with the net contract cost of purchased gas before credits for refund of connection charges are deducted.
- b. Base Data. Therms is the unit of measure and includes the total quantity of gas purchased to date in the current fiscal year. A therm is 100,000 Btu's.

Note. Obtain the Btu content of the gas from copy of the utilities contract on file in the post engineer's office or from the utilities company furnishing gas. The utilities contract specifies the minimum Btu content of the gas which the company must maintain. Multiply the total number of cubic feet of gas consumed during the month by the Btu content, and divide by 100,000. The result is the number of therms.

Example:

Btu content of 1 cubic foot of gas obtained from utilities company = 980

Cubic feet of gas used during the month = 1,560,000

Number of $=\frac{980\times1,560,000}{20000}=15,288$ therms therms 100,000

Section XIII. HEATING SYSTEMS

150. General

Accounts applicable to the elements included in heating systems are described in paragraphs 151 through 163. A heating plant rated at 100 hp or more capacity (or equivalent Btu rating) is considered in these accounts as a central heating sys-A heating plant supplying a consolidated mess hall with a capacity of 1,000 men or more is also considered a central heating system, regardless of its rated capacity.

a. Included. The designation Heating systems

includes the following:

(1) The generation of steam, hot water, and hot air.

(2) Purchase steam.

(3) Transmission from points of origin or delivery to the government to the following:

(a) The low-pressure side of a high-pressure system heating the building proper or the branch main take-off at the building wall in a low-pressure system.

(b) Points of utilization for heating or to connections in case of process equipment for inspections, preventive maintenance, and the like when done by general heating mechanics.

(4) All pressure-reducing stations, condensate and vacuum pumps, flash tanks, and condensate-

receiving tanks regardless of location.

- (5) Equipment and appurtenances such as boilers, feed-water heaters, furnaces, space heaters, water heaters, hot water storage tanks, ranges and ovens (except electric), softeners, pumps, stokers and burners, fans and blowers, instruments and controls, piping and valves, insulation (exclusive of building insulation), breeching, distribution and return lines (exclusive of that included in buildings), and all other permanently installed equipment and appurtenances used in heating systems, plants, and equipment to generate and distribute steam, hot water, and hot air.
- b. Excluded. Excluded from heating systems accounts are the following:
- (1) Interior distribution systems and accessory equipment such as piping, radiators, hot-air ducts and grilles (outside the furnace room), and stove pipes and hoods (attached to kitchen ranges), all of which are chargeable to applicable building accounts.

Note. Inspection, preventive maintenance, etc. on interior distribution systems and accessory equipment when done by general heating mechanics are chargeable to the applicable heating systems account.

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a. Included in this account are the following:

(1) Materials and repair parts used for all

echelons of repairs.

(2) Labor for performing third and higher echelons of maintenance and repairs when done by other than operator attendants during their operating shift.

b. Excluded from this account are all elements of operation described in paragraph

168.

c. Base Data. Cubic yards is the unit of measure and is the total of all refuse burned in the incinerators. The cubic yardage reported is cumulative for the fiscal year.

170. Account 627–20, Refuse Collection and Can Washing

To this account is charged costs applicable to the collection of refuse, salvable scrap, and waste materials and can washing.

a. INCLUDED. The designation Refuse collection and can washing include: the following:

(1) Loading from designated pick-up points the garbage, trash, debris, salvable scrap, and waste materials into suitable vehicles, delivering, and unloading at points of disposal.

(2) Washing and returning garbage cans.

b. Excluded from this account is washing of garbage cans when done at mess halls

by mess personnel.

c. Base Data. Cubic yards is the unit of measure and is the total of all refuse, salvable scrap, and waste materials collected. The cubic yardage reported is cumulative for the fiscal year.

171. Account 627–30, Sanitary Fill

To this account is charged the cost of disposing of refuse by sanitary fill. The designation Sanitary fill is limited to operations outlined in TM 5-634 (when published).

o. Included in this account are the

following:

(1) Salaries of personnel including supervisors assigned to sanitary-fill operations.

(2) Operating supplies such as equipment fuel,

lubricants, and the like.

b. Excluded from this account are

the following:

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- (1) Any portions of sanitary-fill operators' time devoted to collecting refuse or can washing (par. **170)**.
- (2) Methods of refuse disposal not classified as sanitary-fill operations.
- c. Base Data. Cubic yards is the unit of measure and is the total of all refuse as delivered to the sanitary fill for disposal. The cubic yardage reported is cumulative for the fiscal year.
- 172. Account 627–40, Purchased Refuse Disposal To this account is charged the cost of purchased refuse disposal.

a. Included. The designation Purchased refuse disposal includes all refuse collection and disposal done under contract at a cost to the government.

b. Base Data. None.

173. Account 627-50, Other Disposal Methods

To this account is charged the cost of refuse dis-

- posal by other disposal methods.
 a. INCLUDED. The designation Other disposal methods includes burning pits, open burning areas, dumps, garbage grinders, and all other methods of disposal not done by incineration, sanitary fill, or contract.
- b. Base Data. Cubic yards is the unit of measure and is the total of all refuse disposed of by methods other than sanitary fill, incineration, or contract. The cubic yardage reported is cumulative for the fiscal year.

Section XVI. FUEL OTHER THAN GAS AND MOTOR **FUELS**

174. General

a. Included. The designation Fuel other than gas and motor fuels includes centrally and locally procured coal, fuel oil, distillate, kerosene, wood, charcoal, and the like issued for cooking, heating, and the production of steam and hot water.

b. Excluded from fuel accounts are motor fuels, natural and manufactured gas, liquified petroleum gas, fuel consumed by blow torches, melting pots, weed burners, asphalt or tar kettles, blacksmith forges, and the like. Also excluded is the cost of fuel transferred to other posts or government agencies and to offpost facilities.

175. Account 628-11, Coal Issued

- a. Included. To this account is charged the cost of coal, including transportation, issued from storage or delivered direct to points of utilization for cooking, heating, and production of steam and hot water. (See par. 236 for elements included in cost of fuel.)
- b. Excluded. Excluded from this account is the cost of coal sold.
- c. Base Data. Tons is the unit of measure and includes the total tons of coal issued from storage or delivered direct to points of utilization to date in the current fiscal year, exclusive of coal sold.

176. Account 628-12, Fuel Oil Issued

- a. Included. To this account is charged the cost of all residual oils and distillates issued from storage or delivered direct to points of utilization for cooking, heating, and production of steam and hot water.
- b. Base Data. 1,000 gallons is the unit of measure and includes all residual oils and distillates issued from storage or delivered direct to points of utilization to date in the current fiscal year.

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177. Account 628-13. Other Fuel Issued

a. INCLUDED. To this account is charged the cost of wood, charcoal, and the like issued from storage or delivered direct to points of utilization for cooking, heating. and the production of steam and hot water.

b. Base Data. None.

178. Account 628–21, Coal Storage and Distribu-

a. INCLUDED. To this account are charged costs of unloading, hauling, storing, and distributing coal including drayage from railheads located off the post.

b. Excluded from this account are

costs of the following:

(1) Maintenance and repair of coal-handling

equipment and storage areas.

(2) Delivery to bins and other points of utilization if such delivery costs are included in the coal contract. Delivery costs are then included in the cost of coal.

(3) Screening, loading and other handling of coal for shipment to another post. These costs are chargeable to account 634-21 in the costs records of the post shipping the coal, but are not reported to nor taken up in the cost records of the

post receiving the coal.

c. Base Data. "Tons handled" is the unit of measure and includes the number of tons delivered by truck (unless cost of delivery is included in the coal contract price) or railroad car direct to bins and other points of utilization. plus the number of tons delivered to the stock pile, plus the number of tons issued from the stock pile. Thus, it includes the number of tons received (except tonnage delivered to bins and other points of utilization when delivery costs are included in the coal contract price) plus the number of tons issued from the stock pile to date in the current fiscal year.

179. Account 628–22, Fuel Storage and Distribution—Other than Coal

a. INCLUDED. To this account is charged the cost of stacking, unloading, hauling, storing, and distribution of wood, for cooking, heating, and the production of steam and hot water.

b. EXCLUDED. Excluded from this account is the cost of cutting wood and kindling. This is

chargeable to account 634-16.

c. BASE DATA. None.

Section XVII. LIQUID PETROLEUM PRODUCTS STORAGE AND DISPENSING SYSTEMS

180. General

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a. Included. The designation Liquid petroleum products storage and dispensing systems includes

all permanently installed equipment designed primarily for the storage and dispensing of liquid petroleum products to equipment and containers not attached to the dispensing system, and tanks (exterior to buildings) serving motor test blocks.

b. Excluded from this account are storage tanks and equipment directly connected to oil-fired boilers, furnaces, space heaters, com-

bustion engines, etc.

181. Account 629—10, Aircraft Fuel Storage and Dispensing Systems

a. INCLUDED. To this account is charged the cost of maintenance and repair of hydraulic, mechanical pumping, and other types of permanently installed systems used solely for the storage and dispensing of aircraft fuels.

b. Base Data. 1,000 gallons capacity is the unit of measure and includes the total capacity of all storage tanks in the system expressed in

units of 1,000 gallons.

182. Account 629–20, Gasoline Storage and Dispensing Systems—Other than Aircraft

a. Included. To this account is charged the cost of maintenance and repair of permanently installed gasoline-motor-fuel storage and dispensing systems of all types used in servicing trucks, armored vehicles, other automotive equipment, etc., excepting aircraft.

b. BASE DATA. 1,000 gallons capacity is the unit of measure and includes the total capacity of the storage tanks in the system expressed in

units of 1,000 gallons.

183. Account 629–30, Petroleum Products Storage and Dispensing Systems—Other than Gasoline

a. Included. To this account is charged the cost of maintenance and repair of all tanks and accessory equipment used for bulk storage and dispensing of fuel oil, kerosene, diesel oils, lubricating oils, and the like, except gasoline and fuel for aircraft.

b. Base Data. 1,000 gallons capacity is the unit of measure and includes the total capacity of all storage tanks in the system expressed in

units of 1,000 gallons.

Section XVIII. KITCHEN EQUIPMENT

184. Account 630-00, Installed Kitchen Equipment

To this account are charged the costs of maintenance and repair of installed kitchen equipment, including replacement of defective units with comparable units.

a. Included. The designation Installed kitchen equipment includes power-operated and immovable kitchen and mess-hall equipment such as electric ranges; electric ovens; electric broilers;

deep fat fryers; mixers; bains-marie; vegetable steamers; slicing machines; steam jacketed kettles; dish-washers; potato peelers; steam tables; scullery sinks; butcher blocks; coffee urns; coffee makers; toasters; meat, fish, and bone cutting machines; dish trucks; ice chests (except mechanical refrigerators); griddles; meat grinders; spray-rinse cabinets; grease intercepters (both inside and outside buildings); kitchen tables; etc.

b. Excluded from this account are

the following:

(1) Walk-in and reach-in refrigerators (par. 165).

(2) Cooking ranges, ovens and broilers (except

electric) (par. 163).

(3) Mess tables, chairs, and benches (par. 197).

(4) Burners for mess equipment (par. 161).

c. Base Data. None.

Section XIX. OFFPOST FACILITIES

185. General

The designation Offpost facilities includes the minor facilities and installations classified as such in accordance with paragraph 54. Separate ledger accounts are maintained for each minor offpost facility served by or through a main post. For reporting purposes, such accounts are consolidated under applicable accounts 631-10 to 632-20 inclusive.

186. Account 631–10, Offpost Minor Leased Facilities—Maintenance, Repair, and Operation

- a. INCLUDED. To this account are charged all costs of repairs and utilities (excluding new work) incurred on offpost minor leased facilities. To this account is charged the cost of activities and services such as the following:
- (1) Maintenance and repair of buildings, grounds, roads, utilities plants and systems, etc.
- (2) Operation of the fire department and utilities plants and systems.
- (3) Purchased utilities services such as electricity, water, gas, etc.

(4) Fuel.

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b. Base Data. None. Base data of buildings, grounds, roads, utilities plants and systems, and the like located on offpost facilities are not reported under this account nor under the applicable accounts of the main post.

187. Account 631–20, Offpost Minor Leased Facilities—New Work

- a. INCLUDED. To this account is charged the cost of all new work (ch. 10) performed on offpost minor leased facilities.
 - b. Base Data. None.

188. Account 632–10, Offpost Minor Government-Owned Facilities—Maintenance, Repair, and Operation

a. Included. To this account are charged all costs of repairs and utilities (excluding new work) incurred on offpost minor Government-owned facilities. To this account is charged the cost of activities and services such as the following:

(1) Maintenance and repair of buildings, grounds, roads, utilities plants and systems, etc.

(2) Operation of the fire department and utilities plants and systems.

(3) Purchased utilities services such as electricity, water, gas, etc.

(4) Fuel.

b. Base Data. None (par. 186b).

189. Account 632–20, Offpost Minor Government-Owned Facilities—New Work

a. INCLUDED. To this account is charged the cost of new work (pars. 55 to 60, inclusive) performed on offpost minor Government-owned facilities.

b. Base Data. None.

Section XX. MISCELLANEOUS ITEMS

190. General

Accounts described in paragraphs 191 through 199 have been established for purposes indicated in the description of each account.

191. Account 634-11, Undistributed Costs

- a. INCLUDED. To this account is charged only those costs incurred on work of such nature that a specific account code cannot be determined at the time the work is performed. Postings are made so identification of each item can be made when transfer to the correct account is possible. The balance in this account should be small and should diminish when transfers to applicable accounts are made.
 - b. BASE DATA. None.

192. Account 634-12, Snow Removal

- a. INCLUDED. To this account is charged the cost of the following:
- (1) Removal of snow from buildings, roads, airfield pavements, grounds, and the like including hauling and disposition.
 - (2) Ice alleviation.
- (3) Erection, maintenance, repair, and removal of snow fences.
- b. Excluded from this account is the cost of maintenance and repair of snow removal equipment.
 - c. Base Data. None.

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193. Account 634-13, Packing and Crating

a. INCLUDED. To this account are charged costs of packing and crating when such work is assigned as a repairs and utilities function by War Department directive.

b. Excluded from this account are

the costs of the following:

(1) Packing and crating repairs and utilities warehouse stock to prevent breakage while in stock. This cost is chargeable to account 661-30.

(2) Packing and crating which is chargeable

to other than ESA appropriations (par. 238).

c. Base Data. "1,000 pounds" is the unit of measure and includes the shipping weight of items packed and crated as a repairs and utilities responsibility and shipped to date in the current fiscal year based on information obtained from the post transportation officer. (No base data units will be included for local conversion of baggage cars, and blocking, bracing, dunnage and the like of heavy equipment which is to be shipped without being otherwise crated, although costs are properly chargeable to this account.)

194. Account 634—14, Signs—Fabrication and Repair

a. INCLUDED. To this account is charged the cost of fabricating, painting, erecting, moving, and repairing all signs.

b. Base Data. None.

195. Account 634-15, Training Aids

a. INCLUDED. To this account is charged the cost of maintenance and repair and fabrication of training aids. The designation Training aids includes the facilities defined as training aids in AR 100-80, except drill fields.

b. Base Data. None.

196. Account 634-16, Material Production

a. Included. To this account is charged the cost of producing material by the operation of gravel pits, quarries, saw mills, etc., the fabrication of articles such as valves, nipples, bolts, etc., and the reclamation of spare parts from nonrepairable items of class P property (par. 26). Subaccounts are kept for each type of production, fabrication, and reclamation. Periodically, or upon completion of work, the costs in subaccounts applicable to completed items are cleared by crediting the costs accumulated; debiting the inventory or direct work account (depending upon whether stocked or immediately used) for values as determined by exercise of paragraph 17b(5); the difference between the debit and credit entries thus established is offset by entry to Account 699-20 or 699-30, as applicable. (If costs of production, fabrication, or reclamation exceeds value of stock created, Account 699-20 or 699-30, as applicable, is debited with the amount of such excess. In such cases, the advisability of continuing the operation should be investigated, the critical nature of the items being considered.) Costs remaining in this account after the cost records have been closed for the month are reported under this account.

b. Base Data. None.

197. Account 634-17, Furniture and Wall Lockers

a. INCLUDED. To this account is charged the cost of the following:

(1) Maintenance and repair of furniture and

wall lockers.

(2) Fabrication of nonstandard items of furniture.

(3) Fabrication and installation of wall lockers.

b. Base Data. None.

198. Account 634–18, Custodial and Janitorial

a. Included in this account are the following:

(1) The cost of maid service in civilian dormitories, janitor work including window washing,

and the operation of elevators.

(2) The cost of janitorial supplies if procured from repairs and utilities funds, such as wax for floor preservative purposes.

Note. This amount is not used where custodial and janitorial services are not repairs and utilities functions.

b. Base Data. "Square feet" is the unit of measure and includes the total floor area regularly attended by custodial employees under the direction of the Post Engineer.

199. Account 634—19, Elevators—Maintenance and Repair

a. INCLUDED. To this account is charged the cost of maintenance and repair of passenger and freight elevators.

b. Base Data. Number elevators is the unit of measure and includes the total number of passen-

ger and freight elevators on the post.

199.1. Account 634–21, Costs Incurred for Others Without Reimbursement

a. INCLUDED. To this account is charged the cost or value of the following:

(1) Labor payable from repairs and utilities funds and property issued from repairs and utilities stock when expended on work assigned to repairs and utilities under the combined-shop plan.

(2) Property issued to other services on the post without reimbursement when such property is used

for other than repairs and utilities work.

(3) Repairs and utilities work done for other post engineers, including the cost or value of all labor and materials used. These costs are reported to and taken up in the applicable accounts of the post for which the work was done. (Exception, par. 178b(3).)

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(4) Work done in connection with a service command function such as service command schools and training programs.

(5) All other work by the post engineer which is not a repairs and utilities responsibility and for

which reimbursement is not permissible.

b. Base Data. None.

Section XXI. NEW WORK

200. General

Definitions and illustrations of work classifications are given in paragraphs 55 to 60, inclusive. New work done on offpost facilities and fortifications is charged to applicable account 631-20, 632-20, or 640-90. New work includes the following:

a. Additions, alterations, and deletions required by increased requirement or changes in the use of

facilities.

b. New construction authorized under AR 100-80 for accomplishment by the post engineer.

c. Restorations necessitated by disaster.

201. Account 635—10, Additions, Alterations, Deletions, and New Construction—Projects \$1,000 and Under

a. INCLUDED. To this account is charged the cost of additions, alterations, deletions, and new construction when the estimated cost of individual projects does not exceed \$1000.

b. Base Data. None.

202. Account 635—20, Additions, Alterations, and Deletions—Projects Over \$1,000

a. INCLUDED. To this account is charged the cost of additions, alterations, and deletions when the estimated cost of individual projects exceeds \$1000. An individual ledger sheet is maintained for each project as prescribed in paragraph 38.

b. BASE DATA. None.

203. Account 635–30, Restorations Necessitated by

a. INCLUDED. To this account is charged the cost of repair of damage caused by fire, flood,

storm, explosion, and the like.

b. Excluded. Excluded from this account is the cost of repairing damage to real and installed property caused by operational accidents such as collisions, derailments, and the like. Such costs are chargeable to the applicable maintenance and repair accounts.

c. Base Data. None.

Section XXII. FORTIFICATIONS

204. General

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a. INCLUDED. The designation Fortifications includes the following:

(1) Structures such as battery structures, control towers, searchlight towers, and the like.

(2) Narrow-gauge trackage in the fortification area.

(3) Mechanical and power facilities installed in fortification facilities.

b. Excluded. Excluded from fortifications are all nontactical facilities.

205. Account 640—10, Fortifications—Battery . Structures

To this account is charged the cost of maintenance and repair of fortifications' battery structures.

a. INCLUDED. The designation Fortifications—battery structures includes the following:

(1) All fixed gun batteries including antiaircraft and antimotorboat torpedo batteries.

(2) Gun blocks, aprons, loading platforms, case-

mates, corridors, and magazines.

(3) Latrines, plotting rooms, switchboard rooms, spotting rooms, power rooms, and spaces occupied by lighting, power, heating, dehumidifying, and ventilating systems which are an integral part of the battery structures.

b. BASE DATA. Square feet is the unit of measure and includes the total measurable superficial surface of the gun blocks, aprons, floors, loading platforms, decks, etc., including the floor area

occupied by installed equipment.

206. Account 640—20, Fortifications—Other Structures

To this account is charged the cost of maintenance and repair of fortification structures other than battery structures.

a. Included. The designation Fortifications—

other structures includes the following:

(1) Plotting rooms, fire-control towers, underground facilities, and magazine storage when separate from batteries structures.

(2) Searchlight structures.

(3) Mine-cable tanks and loading rooms, mine casemates, and magazines.

(4) All other fortifications structures not otherwise provided for and which are not maintained

by other services.

b. Base Data. Square feet is the unit of measure and includes the total area of all floor surface. Square feet of masts and towers are determined by multiplying the square footage of the base by one-third of the height measured from the base.

207. Account 640–30, Fortifications—Mechanical and Power Facilities

To this account is charged the cost of maintenance and repair of fortifications mechanical and power facilities.

a. INCLUDED. The designation Fortifications—mechanical and power facilities includes lighting, power, heating, dehumidifying, and ventilating systems and all other equipment installed in fortifications structures.

b. Excluded. Excluded from this designation are fire-control equipment, communication systems, armament and Ordnance Department power equipment and rolling stock.

o. Base Data. None.

208. Account 640—40, Fortifications—Other Facilities

To this account is charged the cost of maintenance and repair of fortification facilities not otherwise accounted for.

- a. INCLUDED. The designation Fortifications—other facilities includes fortification railroads and other tactical facilities not otherwise accounted for.
 - b. BASE DATA. None.

209. Account 640-90, Fortifications-New Work

- a. INCLUDED. To this account is charged the cost of all new work (pars. 55 to 60, inclusive) performed on fortification facilities. An individual ledger sheet is maintained for each project estimated to cost \$200 or more as prescribed in paragraph 38.
 - b. BASE DATA. None.

Section XXIII. PASSIVE PROTECTION

210. Account 650-00, Passive Protection (Rescinded)

Section XXIV. SHOP OVERHEAD

211. General

- a. INCLUDED. The designation Shop overhead includes all costs incurred in the operation of post engineer shops that cannot be accurately allocated to specific work orders. It includes cost of items such as the following:
- (1) Supervisory labor when such labor is so diverse that it cannot be directly related to specific work orders.
- (2) Supplies such as sandpaper, glue, grease solvents, wiping rags, and the like which are used in the operation of shops but which are not issued to specific jobs in measurable quantities.

(3) Cleaning shops and cleaning and adjusting

shop equipment.

- (4) Nonproductive time such as time lost waiting for assignment of work, attending training schools, waiting for transportation, and time lost because of inclement weather.
- (5) Awards for suggestions made by shop personnel.
- b. Excluded Excluded from shop overhead accounts are costs of the following:
- (1) Maintenance and repair of shop equipment and nonexpendable tools (par. 221).

(2) Work which is not a repairs and utilities

responsibility.

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(3) Production such as the fabrication of materials and equipment either for stock or immediate use (par. 196).

212. Account 661-10, Carpenter Shop Overhead

- a. INCLUDED. To this account is charged the overhead cost of the carpenter shop.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the carpenter shop, regardless of whether work done is chargeable to carpenter shop overhead or to other accounts. Thus, if all personnel assigned to the carpenter shop work a total of 5,200 man hours in a given month, the base data of account 661-10 is increased by that amount. Man hours expended by personnel of one shop temporarily assigned to another shop are included in the overhead account of the shop to which temporarily assigned.

213. Account 661-20, Paint Shop Overhead

- a. INCLUDED. To this account is charged the overhead cost of the paint shop.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilian, enlisted personnel, general prisoners, and prisoners of war assigned to the paint shop (par. 212).

214. Account 661-30, Storehouse Overhead

To this account is charged the cost of storehouse overhead.

- a. Included. In addition to the items enumerated in paragraph 211a, storehouse overhead includes costs of the following:
- (1) Receiving (unloading and counting), storing (stacking and handling), and issuing all repairs and utilities materials and equipment except fuel.
 - (2) Rewarehousing.
 - (3) Taking inventory.
- b. Excluded from storehouse overhead is the cost of operating the property section. This is chargeable to account 670-00.
- c. Base Data. "Dollars" is the unit of measure and will represent the value of expendable and class P property issued from the warehouse for use on the post to date in the current fiscal year. (This will represent the net value of supplies issued on WD AGO Forms 5-102 and 5-103 and recorded as credits to Account 682-10. Net values will be total issues less over-issues returned to stock but not reduced by other returns to stock, such as serviceable class P property removed from facilities and supplies reclaimed through salvage operations.)

215. Account 661-40, Machine Shop Overhead

a. INCLUDED. To this account is charged the overhead cost of the machine shop.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the machine shop (par. 212).

216. Account 661-50, Electric Shop Overhead

a. Included. To this account is charged the

overhead cost of the electric shop.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the electric shop (par. 212).

217. Account 661–60, Plumbing and Steam-Fitting Shop Overhead

a. INCLUDED. To this account is charged the overhead cost of the plumbing and steam-fitting

shop

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the plumbing and steam-fitting shop (par. 212).

218. Account 661–70, Sheet-Metal and Heating-Equipment Shop Overhead

a. INCLUDED. To this account is charged the overhead cost of the sheet-metal and heating-

equipment shop.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the sheet-metal and heating-equipment shop (par. 212).

219. Account 661-80, Other Shops Overhead

To this account is charged the overhead cost of

other post engineer shops.

a. INCLUDED. Included in other shops are shops for which specific account have not been provided, such as blacksmith shop, refrigeration and airconditioning shop, kitchen-equipment shop, and the like. Subaccounts may be maintained for each shop included in this account, but the aggregate cost and base data are reported under account 661-80.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilian, enlisted personnel, general prisoners, and prisoners of war, assigned to shops classified as other (par. 212).

220. Account 661-90, General Labor Crew Overhead

a. Included. To this account is charged the overhead cost of the general labor crew. Stations not having crews specifically designated or operating as general labor crews do not record or report

costs or base data under this account.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war regularly assigned to the general labor crew, regardless of whether labor costs are chargeable to general labor-crew overhead or other accounts.

Note. General labor-crew employees reassigned to another post engineer shop or activity are dropped from the daily labor report for the general labor crew and picked up on the daily labor report of the activity or shop to which reassigned.

Section XXV. MAINTENANCE, MACHINERY, TOOLS, ETC.

221. Account 662–00, Maintenance Machinery, Tools, Etc.—Maintenance and Repair

To this account is charged the cost of maintenance and repair of machinery, tools, and the like, and of replacing defective or worn out maintenance equipment installed in repairs and utilities shops with comparable units.

a. INCLUDED. The designation Maintenance machinery, tools, and the like includes repairs and utilities power-operated and power-drawn maintenance equipment, nonexpendable hand tools, and miscellaneous equipment such as the following:

(1) Special-purpose and special-equipment ve-

hicles (except fire trucks).

(2) Maintenance equipment installed in repairs and utilities shops.

(3) Small tools.

- (4) Miscellaneous portable equipment such as air-circulating desk and wall fans, rotors, lights, air compressors, coal-handling equipment, and the like.
- b. Excluded from this account are costs of the following:
- (1) Replacement of complete units of maintenance machinery and tools except maintenance equipment installed in repairs and utilities shops. For replacement of maintenance equipment other than this *installed* equipment, see paragraphs 234 and 235.
- (2) Operator's time. fuel, lubricants, and the like. This is chargeable to the work on which the equipment is engaged.
- (3) Equipment for which other services have the responsibility for maintenance and repair.

c. Base Data. None.

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Section XXVI. SALVAGED AND DESTROYED **PROPERTY**

222. Account 664-00, Property Salvaged and De-

a. INCLUDED. To this account is charged the

cost or value of the following:

(1) Expendable and nonexpendable property destroyed or damaged beyond repair while in stock.

(2) Nonrepairable MR property turned over to

the salvage officer.

b. ExcLUDED. Excluded from this account is the cost or value of the following:

(1) Excess property turned over to the salvage

- officer (par. 240).
 (2) Nonrepairable class P property removed from installations.
 - (3) All lost property. c. BASE DATA. None.

Section XXVII. LEAVE OF ABSENCE

223. Account 669-00, Annual and Sick Leave Taken

a. Included. To this account is charged the cost of all annual, sick, holiday, and terminal leave taken by post engineer civilian employees. The cost of leave is debited to this account in the period for which leave is paid without regard to the periods in which such leave is earned.

b. BASE DATA. Man hours is the unit of measure and is the total hours of leave taken to

date in the current fiscal year.

Section XXVIII. POST ENGINEER OFFICE 224. Account 670-00, Post Engineer Office

a. Included. To this account is charged the cost of the functions of the post engineer office.

Included are the following:

(1) Salaries of civilian administrative and clerical personnel engaged in general office work, property accounting, cost accounting, preparation of work orders, and the like.

(2) Salaries of civilian personnel employed as

superintendents of maintenance.

(3) Salaries of civilian personnel engaged in civil, sanitary, electrical, mechanical, and other

engineering functions.

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- (4) The value as established by paragraph 12 of enlisted personnel and prisoners of war engaged in the activities set forth in paragraphs 224a (1) through (3).
 - (5) Fees of consultants and architect engineers.

(6) Cost of preparing and reproducing maps,

plans, specifications, and estimates.

- (7) Awards for suggestions applicable to repairs and utilities work made by post engineer office personnel.
 - b. Excluded from this account is

the cost of the following:

(1) Labor of foreman.

(2) Labor of plant supervisors.

(3) All other costs that are applicable to

shop overhead accounts or other accounts.

c. Special Cases. Some personnel are assigned to work not readily chargeable to specific accounts. Example: An employee responsible for over-all operation of the water and sewage systems is in the same category as a sanitary engineer or general superintendent. Labor cost of such personnel is considered as overhead and chargeable to post engineer office.

d. BASE DATA. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, and prisoners of war assigned to the post engineer office or performing work chargeable to this account. Man hours reported are cumulative for

the fiscal year.

Section XXIX. RECONCILIATION ACCOUNTS

225. General

The designation Reconciliation accounts includes accounts 680-10 to 699-60 inclusive. Accounts 680-10 to 686-00 inclusive are debit-balance accounts except that accounts 681-20 and 682-90 may reflect either debit or credit balances. Accounts 695-00 to 699-60 inclusive are creditbalance accounts. The summation of the debit balance accounts must equal the summation of the credit balance accounts. Except for account 699-10, none of these reconciliation accounts has base data.

226. Account 680-10, Total Cost This Fiscal Year to Date—Main Post

The net balance in this account after all postings for the month must equal the summation of balances in accounts 610-11 through 670-00.

a. Debited to this account are the total monthly increments recorded in detail in accounts 610-11 through 670-00 for the main post (par. 39).

b. Credited to this account are the

following:

(1) The closing balance in this account as of the end of the fiscal year (par. 230)

(2) Costs applicable to deleted facilities (par.

(3) Costs applicable to transferred offpost facilities (par. 229).

227. Account 680–20, Total Cost This Fiscal Year to Date—Subposts

The total cost for the fiscal year to date for each subpost is reported under this account on the report for each subpost. Also, the total cost to date for all subposts are reported under this account on the report for the applicable main post. After all postings have been made for the month, the net balance in this account for main posts must equal the summation of the balances in accounts 610-11 through 670-00 for applicable subposts. Similarly, in the accounts for each subpost the balance in this account must equal the summation of balances in accounts 610-11 through 670-00 for the individual subpost.

a. Debited to this account are the total monthly increments recorded in detail in accounts 610-11 through 670-00 for subposts (par. 39). Account 680-20 is maintained in the accounts for subposts and in the accounts for main posts to which subposts are attached.

b. Credited to this account are the

following:

(1) The closing balance in this account as of the

end of the fiscal year (par. 230).

(2) Costs applicable to deleted facilities (par. 228).

(3) Costs applicable to transferred subpost facilities (par. 229).

228. Account 680–30, Total Costs This Fiscal Year to Date—Deleted Facilities

The cost to date for the current fiscal year applicable to deleted facilities is determined by multiplying the unit cost at time of deletion by the number of base-data units deleted. Accounts, except minor offpost facilities, for which no base data is prescribed are not reduced when maintenance responsibility is decreased. Costs applicable to deleted subpost facilities are credited to the applicable cost accounts 610-11 through 670-00 and account 680-20 in the cost records for the subpost. This deletion is also reflected in the applicable main-post reconciliation accounts as a credit to account 680-20 and a debit to account 680-30.

a. Debited to this account are the

following:

(1) The pro rata share of the costs of operation, maintenance, and repair incurred to date in the current fiscal year on facilities such as buildings, roads, utilities systems, and the like which have been demolished or otherwise removed. The corresponding credits are to appropriate accounts 610-11 through 670-00 and account 680-10 or 680-20 as applicable.

(2) The cost of operation, maintenance, repair, and new work incurred to date in the current fiscal year on minor offpost facilities disposed of either by cancellation of lease or as surplus government-owned facilities. The corresponding credits are to the applicable offpost facilities accounts 631-10 through 632-20 and account 680-10.

b. CREDITED. Credited to this account is the closing balance in this account as of the end of the final year (per 220)

fiscal_year (par. 230).

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c. Excluded from this account are

costs incurred on facilities transferred from one account to another following conversion. The pro rata share of costs incurred on such facilities before conversion are computed as prescribed for deleted facilities and transferred to the accounts applicable to the converted facilities.

229. Account 680–40, Total Cost This Fiscal Year to Date—Transferred Facilities

When repairs and utilities functions for offpost facilities and subposts are transferred from one station to another, the transferring station furnishes the receiving station a record of the closing balances of the applicable accounts. This record indicates totals of labor, materials, supplies, and the like as shown on the cost-ledger sheets.

a. Debited. Debited to this account are the total costs incurred during the current fiscal year for maintenance, repair, operation, and new work on the following types of facilities when their repairs and utilities functions are transferred to another station without adjustment of funds.

(1) Minor offpost facilities, both Governmentowned and leased. The corresponding credit is to applicable accounts 631-10 through 632-20 and

account 680-10.

(2) Subposts. The corresponding credit is to applicable accounts 610-11 through 670-00, account 680-20 for the subpost, and account 680-20 for the main post serving the subpost.

b. CREDITED. Credited to this account is the closing balance in this account as of the end of

the fiscal year (par. 230).

230. Account 681–10, Prior Years' Costs—Feature Accounts

The fiscal year-end transfer of balances to this account from the accounts cited below is done after the submission of cost reports for the period ending 30 June of each fiscal year. Concurrently with this transfer, ledger sheets for accounts 610-11 through 670-00 are closed.

a. Debited to this account are the

following:

(1) The balances as of the close of each fiscal year of accounts 680-10, 680-20, 680-30, and 680-40.

(2) Debit adjustments and items of cost appli-

cable to prior fiscal-year transactions.

b. CREDITED. Credited to this account are credit adjustments applicable to prior fiscal-year transactions.

231. Account 681–20, Prior Years' Costs—Reconciliation Accounts

The fiscal year-end transfer of balances to this account is made after the submission of cost reports covering the period ending 30 June of each fiscal year.

a. Debited to this account are the

following:

(1) The balances as of the close of each fiscal

year in accounts 682-90, 683-40, and 686-00.

(2) Debit balances in reconciliation accounts maintained in the preceding fiscal year but deleted from chart of accounts in paragraphs 61 and 62.

(3) Debit adjustment entries and items of cost applicable to prior fiscal-year transactions which affect accounts listed in paragraph 231a(1).

b. CREDITED. Credited to this account are the

following:

(1) The balances as of the close of each fiscal year in accounts 682-90, 695-00, 699-10, 699-20, 699-30, 699-40, 699-50, and 699-60.

(2) Credit balances in reconciliation accounts maintained in the preceding fiscal year but deleted from the chart of accounts in paragraphs 61 and 62.

(3) Credit-adjustment entries and items of cost applicable to prior fiscal-year transactions affect-

ing accounts listed in paragraph 231b(1).

c. The fiscal year-end transfer of balances to this account is made after the submission of cost reports covering the period ending 30 June of each fiscal year.

232. Inventories

The designation *Inventories* includes the expendable and nonexpendable property classified in accordance with TM 5-601 and recorded on stock-record cards. Property on the stock-record cards and picked up in the inventory account is priced as shown in paragraph 17. Inventory-account balances are reconciled quarterly (par. 43a). Inventory accounts are adjusted for overages and shortages in stock (par. 20). The accounts applicable to inventories are described in paragraphs 233 through 237.

233. Account 682–10, Inventory—Expendable and Class P Property

This account reflects the total cost or value of expendable and class P property recorded on stock-record cards.

a. Debited to this account are the following:

The cost or value of all expendable and class
 P property taken up on the stock-record cards.

- (2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly reconcilement.
- b. Credited to this account are the following:

(1) The cost or value of all expendable and class P. property dropped from stock-record cards.

- (2) Amounts by which total values recorded on the applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.
- c. Excluded. Excluded from this account is the cost or value of heating fuels (par. 236).

234. Account 682–20, Inventory—Accountable MR Property—Other Than Power-Operated Maintenance Equipment

This account reflects the total cost or value of all MR property, other than power-operated and power-drawn maintenance equipment, recorded on the stock-record cards. Maintenance and repair of items retained in this account are recorded as costs under account 662-00, except that such costs for miscellaneous fire-fighting equipment is charged to account 615-60.

a. Debited to this account are the

following:

(1) The cost or value of all MR property, other than power-operated and power-drawn maintenance equipment, taken up on the stock-record cards. These values are retained in this account until the property is removed from post engineer accountability.

(2) Amounts by which total values on applicable stock-record cards exceed the balance in this account as determined by quarterly reconcilement

account as determined by quarterly reconcilement.

b. Credited. Credited to this account are the

following:

(1) The cost or value of accountable MR property, other than power-operated and power-drawn maintenance equipment, when dropped from the stock-record cards by removal from post engineer accountability.

(2) Amounts by which total values on applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.

235. Account 682–30, Inventory—Accountable MR Property—Power-Operated Maintenance Equipment

This account reflects the total cost or value of MR power-operated and power-drawn maintenance equipment recorded on stock-record cards. Maintenance and repair of items retained in this account are recorded as costs under account 662–00, except that such costs for fire trucks are charged to account 615–20.

a. Debited to this account are the

following:

(1) The cost or value of all MR power-operated and power-drawn maintenance equipment taken up on the stock-record cards. These values are retained in this account until the property is removed from post engineer accountability.

(2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly

reconcilement.

b. CREDITED. Credited to this account are the

following:

(1) The cost or value of accountable MR power-operated and power-drawn maintenance equipment when dropped from the stock-record cards by removal from post engineer accountability.

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(2) Amounts by which total values recorded on applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.

236. Account 682-40, Inventory-Fuel

This account reflects the total cost or value, including transportation, of heating fuels recorded on the stock-record cards.

a. Debited to this account are the

following:

- (1) The cost or value including transportation of all heating fuel taken up on the stock-record cards.
- (2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly reconcilement.

b. CREDITED. Credited to this account are

the following:

(1) The cost or value, including transportation, of all heating fuels dropped from the stock-record cards.

(2) Amounts by which total values recorded on applicable stock-record cards are less than the balance in this account as determined by quar-

terly reconcilement.

c. EXCLUDED. Excluded from this account is the cost or value of motor fuels, gasoline and fuels consumed by blow torches, melting pots, weed burners, blacksmith forges, and the like, which are carried in account 682-10 if stocked by the post engineer.

237. Account 682-90, Inventory Adjustments

a. General. To this account are recorded contra entries for adjustment to the inventory accounts. The amount of an adjustment is computed on the basis of:

(1) Net shortages or overages on individual in-

ventory-adjustment reports.

(2) The quarterly reconcilement between the value shown on stock-record cards and the values reflected in the applicable inventory accounts.

b. Debited to this account are the

following:

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(1) The cost or value of net shortages on inventory-adjustment reports and reports of survey except when a financial settlement is to be obtained. In such cases, appropriate amounts are debited to applicable accounts receivable.

(2) Amounts by which total values recorded on stock-record cards are less than the balances in the applicable inventory accounts as determined by

quarterly reconcilement.

(3) The closing balance in this account as of the end of the fiscal year when the final amount is a credit balance. c. CREDITED. Credited to this account are the following:

(1) The net overages on inventory-adjustment

reports.

(2) Amounts by which total values recorded on stock-record cards exceed the balances in the various inventory accounts as determined by quarterly reconcilement.

(3) The closing balance in this account as of the end of the fiscal year when the final amount

is a debit balance.

Note. This account may have a debit or credit balance depending on the value of overages compared with the value of shortages.

238. Account 683-10, Accounts Receivable

a. Debited to this account are the costs of labor, materials, equipment, and non-personal services accomplished or furnished by the post engineer to other posts, departments, agencies, or others for which reimbursement is to be obtained, either by billing or by quoting applicable funds on expenditure documents.

b. CREDITED. Credited to this account are the

following:

(1) Reimbursements received either by check, Standard Form 1080, WD AGO Form 14-104, or by application of appropriate funds on expenditure documents.

(2) Delinquent accounts when turned over to the service command finance officer for collection.

c. Subaccounts. Subaccounts are maintained for each debtor for which costs have been incurred. The balances of the subaccounts are consolidated and reported on the monthly cost report as one amount under this account.

239. Rescinded. See paragraph 199.1.

240. Account 683-40, Excess Property Transferred

a. Debited. Debited to this account is the cost or value of all excess property transferred from post engineer accountability, including excess property transferred to the salvage officer. The contra entries are credits to the applicable inventory accounts.

b. CREDITED. Credited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

c. EXCLUDED. Excluded from this account is the cost or value of specialized maintenance equipment transferred from post to post to accomplish specific work programs. The value of such equipment is cleared from the cost records by reversing the original entry when the equipment is transferred. If the equipment is received in one fiscal year and transferred in the following fiscal year, account 681-20 is debited for the value of the equipment transferred.

241. Account 684-00, Unexpended Allotments

The balance in this account reflects the amount of repairs and utilities funds unexpended.

a. Debited to this account are the

following:

(1) The amount of allotments received, repairs

and utilities funds only.

(2) Expenditure refunds, except refunds applicable to completed allotments and recoupment of utilities connection charges.

(3) Collections affected by WD AGO Form

14-104.

b. CREDITED. Credited to this account are the following:

(1) Expenditures of the post's repairs and

utilities funds.

(2) Decreases in allotments of repairs and utilities funds.

242. Account 686-00, Collections

Contra entries for items debited this account are credits to the accounts-receivable account.

a. Debited to this account are the

following:

- (1) Collections classified as appropriation reimbursements or as miscellaneous receipts as defined in TM 14-702.
- (2) Expenditure refunds applicable to completed repairs and utilities allotments. Expenditure refunds applicable to incompleted repairs and utilities allotments are debited to account 684-00.
- b. CREDTTED. Credited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

243. Account 695-00, Rentals and Other Revenue

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. Credited to this account are the

following:

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(1) All sales of utilities such as electric current, gas, and water, including deductions from post engineer payrolls in payment for such services.

Note. The cost to produce or purchase utilities services as recorded in applicable utilities accounts is not reduced in consideration of the sale of such services.

(2) Deductions from repairs and utilities payrolls for rental of quarters.

(3) Rentals of Government-owned equipment.

(4) Time discounts allowed by vendors and contractors for prompt payment of invoices. The contra entries for time discounts are included in the debits to account 698–10 on liquidation of indebtedness.

244. Account 697–10, Allotments Received—This Fiscal Year to Date

a. Debited to this account are the following:

(1) The decreases in repairs and utilities allotments. The contra entries are credits to account 684-00.

(2) The closing balance in this account as of the end of the fiscal year which is transferred to account 697-20. This balance is transferred after submission of cost reports covering the period ending 30 June of each fiscal year.

b. CREDITED. Credited to this account are allotments of repairs and utilities funds received during the current fiscal year. The contra entries

are debits to account 684-00.

245. Account 697–20, Allotments Received—Prior Fiscal Years

a. Debited to this account are decreases in allotments for the preceding fiscal year. Debits are made to this account only after balances of allotments received for the preceding fiscal year have been transferred to this account.

b. CREDITED. Credited to this account is the closing balance in account 697-10, which is transferred to this account as of the end of each

fiscal year.

246. Accounts Payable

a. These accounts reflect the cost of labor expended and the cost of materials, supplies, equipment, utilities, and other services received as evidenced by WD AGO Forms 5-112 for which advice of payment has not been received and when such items are procured from the following:

(1) Repairs and utilities funds available to the

post.

(2) Other than repairs and utilities funds when reimbursement for accounts receivable are obtained by quoting other appropriate funds on post engineer pay rolls and other expenditure documents.

b. The accounts-payable account balances must reconcile with the accounts payable entries on WD AGO Forms 5-112 in the open-voucher file

(par. 43b(2)).

c. The individual accounts payable accounts are described in paragraphs 247 and 248.

247. Account 698—10, Accounts Payable—Materials, Supplies, and Nonpersonal Services

a. Debited to this account are expenditures for materials, supplies, and nonpersonal services as evidenced by appropriate notations on duplicate copies of WD AGO Form 5-112 received from the fiscal office. The contra entries are credits to account 684-00 for amounts paid from post repairs and utilities funds, account 695-00 for deductions of time discounts, and the appropriate subaccounts under account 683-10 for amounts paid from other than repairs and utilities funds, when such funds are quoted on expenditure documents in order to obtain reimbursement.

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Credited to this account are b. Credited. costs of materials, supplies, equipment, utilities, and other services received as evidenced by WD AGO Forms 5-112, payment for which is made from post repairs and utilities funds and, when applicable, other appropriate funds which are quoted on expenditure documents in order to obtain reimbursement. The contra entries for materials, supplies, and equipment are debits to the applicable inventory accounts, except that items expended immediately upon receipt through certificates of expenditure are debited direct to applicable cost accounts. The contra entry for utilities and other services are debits to the applicable cost accounts.

248. Account 698-20, Accounts Payable-Pay Rolls

a. Debited to this account are total expenditures of funds for the payment of personnel on repairs and utilities pay rolls as evidenced by appropriate notations on duplicate copies of WD AGO Form 5-112 received from the fiscal office. Included in such debits are the

(1) Amounts of pay-roll deductions from post engineer personnel for rental of quarters, sale of

utilities, and the like.

(2) Direct payments from other than post repairs and utilities funds when such funds are quoted on expenditure documents in order to obtain reimbursement.

Note. The contra entries are credits to account 684-00 for the amount paid from post repairs and utilities funds; account 695-00 for the amounts deducted from repairs and utilities employees for rental of quarters, sale of utilities, etc.; and account 683-10 for the amount of repairs and utilities personnel labor cost paid from other than repairs and utilities funds.

b. Credited. Credited to this account are total costs of labor expended for personnel included on repairs and utilities pay roll. Such costs are evidenced by appropriate information on WD AGO Forms 5-101 in conjunction with applicable WD AGO Forms 5-112. The contra entries are debits to the accounts applicable to work performed or account 669-00, as indicated on WD AGO Form 5-101.

249. Costs Not Chargeable to Post Repairs and **Utilities Funds**

The accounts applicable to costs not chargeable to post repairs and utilities funds are described in

paragraphs 250 through 255.

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a. INCLUDED. To this series of accounts is recorded the value of labor, materials, supplies, equipment, and services received for which post repairs and utilities funds are not charged but for which repairs and utilities funds are applicable.
b. Excluded. Excluded from this series of

accounts are overages disclosed by physical inven-

tory and reconciliation of values on stock-record cards with values in inventory accounts. Such overages are credited to account 682-90.

250. Account 699–10, Costs Not Chargeable to Post Repairs and Utilities Funds—Labor

a. Debited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

- b. CREDITED. Credited to this account is the value of labor expended on repairs and utilities work by civilians other than repairs and utilities personnel (when on a nonreimbursable basis), enlisted men, general prisoners, and prisoners of war. The contra entries are debits to the appropriate cost accounts indicated on WD AGO Forms 5-101.
- c. Base Data. Man hours is the unit of measure and includes the total hours of labor expended on repairs and utilities work by personnel indicated in paragraph 250b to date in the current fiscal

251. Account 699–20, Costs Not Chargeable to Post Repairs and Utilities Funds—Materials and Supplies

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. CREDITED. Credited to this account are the

following:

(1) The cost or estimated value of materials and supplies including centrally procured items and motor fuels transferred to the post engineer without charge. The contra entries are debits to the applicable inventory accounts.

(2) The differences between the cost of producing, reclaiming, and reconditioning materials and parts, including parts removed from class P property and the value of like items carried in stock

or fair market value if such items have not previously been stocked (pars. 26 and 27b).

252. Account 699–30, Costs Not Chargeable to Post Repairs and Utilities Funds—Machinery and Equipment

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. Credited to this account are the

following:

 The cost or estimated value of machinery. tools, and equipment including centrally procured items, maintenance machinery, and the like transferred to the post engineer without charge. The contra entries are debits to the applicable inven-

(2) The inventory value of serviceable class P property removed from facilities and placed in stock. The contra entries are debits to account 682-10 or the applicable cost accounts (par. 25).

253. Account 699—40, Costs Not Chargeable to Post Repairs and Utilities Funds—Fuel

a. Debited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

b. CREDITED. Credited to this account are the costs, including transportation, of heating fuel (other than motor fuel which is credited to account 699-20) received by the post engineer without charge. The contra entries are debits to account 682-40.

254. Account 699–50, Costs Not Chargeable to Post Repairs and Utilities Funds—Other

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. CREDITED. Credited to this account are the

following:

- (1) The cost or estimated value of work done under contracts administered by command head-quarters and other services (for which accounts have not been provided) received by the post engineer without charge. The contra entries are debits to the applicable cost accounts or inventory accounts.
 - (2) The value of repairs and utilities work per-

formed by other agencies under the combinedshop plan. The contra entries are debits to the applicable cost accounts.

255. Account 699–60, Costs Not Chargeable to Post Repairs and Utilities Funds—Facilities Received by Transfer

When repairs and utilities for offpost facilities and subposts are transferred, the transferring station furnishes the receiving station a record of the closing balances of the applicable accounts. The record of closing balances indicates the totals for labor, materials, supplies, and the like as shown in the cost records.

a. Debited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

b. CREDITED. Credited to this account are the costs of maintenance, repair, operation, and new work incurred in the current fiscal year on minor offpost facilities (both Government-owned and leased) and subposts, when the repairs and utilities functions at such facilities are assigned to the post engineer by transfer from another without an adjustment of funds. The contra entries are debits to the applicable accounts 631-10, 631-20, 632-10, 632-20, and 680-10 in the case of offposts, and to the applicable accounts 610-11 through 670-00 and account 680-20 in the case of subposts.

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FOREWORD

TM 5-602, Cost Accounting—Repairs and Utilities, contains revised accounts and procedures previously published in ASF Manual M 502, Code of Accounts for Repairs and Utilities Cost Accounting, and Office of the Chief of Engineers Cost Accounting Manual, chapter III, Repairs and Utilities.

Changes to this manual will be supplied on a page basis, and will be published as required. As change pages are received, they will be inserted in their proper places, and the replaced pages destroyed. Pages which represent changes will bear the number and the date of the change.

Paragraphs are numbered consecutively throughout the manual. Paragraphs bearing decimal suffixes indicate newly added material; for example, paragraph 33.1 represents the first main paragraph following paragraph 33.

Pages are numbered consecutively throughout the manual. If additional pages are required within the manual, the added pages will be identified by alphabetical suffixes "A," "B," "C," etc. For example, if a new page is added between 24 and 25, the page will be numbered 24A. A second additional page in the same place would be numbered 24B. Additional pages will also indicate the number of the following page.





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APPENDIX. FLOW CHART.

CHAPTER 1 INTRODUCTION

1. Purpose

This Technical Manual presents a uniform system of cost accounting for repairs and utilities at Army posts, camps, and stations. Procedures set forth and the various accounts prescribed provide all echelons of command with the following:

a. Means of controlling repairs and utilities

costs.

b. Data for preparing budgets based on actual

requirements.

c. Uniform basis for comparing the efficiency of methods and personnel used to perform identical repairs and utilities activities at both post and command level.

2. Scope

Explanations and procedures include the following phases of cost accounting for repairs and utilities functions at Army installations.

a. Preparation and use of work orders.

b. Establishing costs for labor, material, and equipment.

c. Contracts entered into by the Government

for repairs and utilities services.

d. Methods of recording, reconciling, and reporting costs.

e. Classifying Army installations and work

performed.

f. Defining and describing the various accounts to be charged with repairs and utilities costs.

3. Applicability

Procedures set forth in this Technical Manual become effective immediately; optional procedures described herein may be inaugurated by post engineers only when authorized by the appropriate headquarters of a higher command.

a. INCLUDED. (1) This manual is applicable in its entirety to all repairs and utilities functions at class I, II, III, and IV command installations within the continental limits of the United States.

(2) Methods prescribed herein are followed in accounting for cost of construction work financed with construction funds when performed by the post engineer acting in the capacity of resident

engineer. The cost of this work is accumulated in accounts prescribed by the Office, Chief of Engineers (OCE) in directives regarding military activities.

b. EXCLUDED. Procedures and accounts prescribed herein are not to be interpreted as authority for accomplishment of work and are not to be construed as repairs and utilities policy concerning maintenance, repair, operation, and construction.

4. Relation to Other Accounting Records

Forms, records, and reports provided herein are basic repairs and utilities cost-accounting records at field installations. Although cost accounting is integrated with fiscal and property accounting, this manual does not include accounting requirements for funds and property or those involved in stock-control procedures.

5. Responsibility

- a. Post Level. Primary responsibility for repairs and utilities cost accounting lies with the post engineer under the direction of the post commander.
- b. Command Level. Command responsibility for repairs and utilities cost accounting at field installations is charged to service command engineers under the direction of commanding generals of service commands for all class I, II, and IV installations. Command responsibility is charged to the Commanding General, AAF, for class III installations. The service command engineer will inspect and audit repairs and utilities cost-accounting procedures and records at each class I, II, III, and IV installation in the geographical limits of the service command at least once each 4 months.
- c. Coordination. Accurate cost accounting requires close coordination of cost accounting with fiscal and property accounting and other administrative functions. To insure accuracy, cost accounting must also be closely coordinated with the technical phases of repairs and utilities. Necessary action is to be taken at post and command levels to insure accurate recording and reporting of costs and base data.

CHAPTER 2 WORK ORDERS

6. General

The work order, WD AGO Form 5-35 (fig. 1), provides repairs and utilities personnel an approved form for authorizing maintenance, repair, and operational work. In addition to this primary purpose, work orders show which account is chargeable with cost of work authorized. They are the authority for withdrawing property from stock and provide means of job follow-up.

7. Work Requests

Requests for work originate from one of the following three sources:

a. Minor requests for routine maintenance and repair telephoned to the work-order desk.

b. Work initiated by the post engineer or his

staff.

c. Work requests originated by another organization on the post.

8. Preparation

An individual work order, WD AGO Form 5-35, is prepared in triplicate in the post engineer office for each maintenance and repair job (exception, those prepared on monthly and preventive maintenance work orders as in pars. 9 and 10), operation

SEE			
ACC M DDE No. 610-	REPAIRS AND U	TILITIES W. 7 ORDER	WORK ORDER No. / 87
28 July 19	45 CO ENTY RECORD	BUILDING TO UTILITY	521
PERSON MAKING REQUEST	E. Smith, Major	M.C. ORGANIZATION Por	et Headquarters
TO FOREMAN OF (specify shop)	Carpenter		26 July 1945
NATURE OF WORK Repair	in damaged sta	ira - Replac	three broken
treads with	h new materia,	l, turn rem	aining treads.
place worn	side y won a	nd of the	rear.
SEE Z	SEE SO	Z	
E	Zo E	E	
JADASSIGNED WORK	her 0 28 July 43		Le Alexander
APPROVAL RECOMMENDED	4. E. Mann	PROVED W.J.	Hill. Major. C.E.
WD AGO FORM 5-35 This form	n supersedes WD OCE Form 289, 8 Januar ay be used until existing stocks are exh	y 1943, susted.	49-10-42800-2 U. S. SOVERHEERT PRINTING OFFICE

- NOTE A Date determined by post engineer or other authorized individual.
 - B Name of authorized person and organization requesting work.
 - C Completed by shop foreman.
 - D Name of authorized person recommending approval.
 - E Signed by post engineer or by other authorized personnel.

 Figure 1. WD AGO Form 5-35 (Repair and Utilities Work Order).

of utilities, new work, installation and removal of permanently installed equipment and fixtures, material production such as quarrying, saw-mill operation, fabrication of items for stock, and issue of materials where no labor is involved. Work orders need not be typed; more than three copies may be prepared if local conditions warrant.

a. Account Code. Only one account code is assigned to a work order. If the project's cost is chargeable to more than one account code, separate work orders, each with an individual workorder number, are issued to cover the work chargeable to each account code. Where more than one shop is to work on a single job chargeable to a single account code, one set of the work order is prepared for each shop concerned, all sets having the same work-order number. Where more than one set of work orders is prepared for a single job, the names of all shops concerned are listed on each set. Work orders covering work on which individual job costs are required (par. 38) are identified by a suffix to the account-code number or work-order number that permits accumulating individual job costs.

b. Work Description. To insure clarity and completeness, particular attention must be given to the description of the work. Enough information to allow efficient planning and performance must be given. To permit assigning the proper account code to which the cost is chargeable, the factors necessitating the work must be explained.

9. Monthly Work Orders

Work to be done by crews, labor gangs, plant operators, and other personnel engaged in one type of work, chargeable to one account code, is authorized by monthly work orders prepared as shown in paragraph 8. Supplies required to operate such plants and activities are issued on the authority of monthly work orders. Materials issued on monthly work orders are limited to minor supplies listed in TM 5-601 (when published).

10. Preventive Maintenance Work Orders

Minor routine maintenance and repair work by preventive maintenance personnel specifically designated as such is done on the authority of monthly work orders (par. 9). Regular individual work orders (par. 8) are processed for all shops for which individual requests are received and for all maintenance and repair work beyond the scope of routine preventive maintenance. Preventive maintenance work orders and distribution of costs are processed as follows:

a. Buildings and Structures. One monthly work order is written for all minor routine maintenance and repair on buildings and structures at the post regardless of building type. These work orders are coded to an appropriate subaccount under account 634-11. If the post is subdivided into areas with a preventive maintenance crew assigned to each area, separate work orders are

written for each area. In such cases, account codes are prefixed or suffixed with the symbol designating the area. Example: Account 634-11-B refers to the buildings and structures in area B.

b. Establishing Subaccounts. A single subaccount is established under account 634-11, or separate subaccounts are maintained for each area if the post has been subdivided into areas. Labor and material costs for maintenance and repair on buildings and structures are accumulated in the designated subaccount. At the end of each month, the preventive maintenance cost accumulated under account 634-11 is distributed to the building-account codes on the basis of square feet of floor area by types of buildings. If the post has been subdivided into areas, separate cost distribution for each area is made.

c. Other Monthly Work Orders. Separate monthly work orders are written for preventive maintenance work chargeable to accounts 626-00, 630-00, 662-00, applicable heating-system accounts, and the like. Although the responsibility for preventive maintenance on installed equipment included in these separate accounts may be divided into areas, writing separate monthly work orders or accumulating these costs by areas is not necessary unless special cost information is desired. These work orders are coded, and costs are accumulated directly in the accounts of the facilities concerned.

11. Distribution

a. Original and duplicate copies of WD AGO Form 5-35 are given to the appropriate personnel in charge of shops, crews, labor gangs, plants, and the like. The post engineer office files the triplicate copy by shops in the incompleted work-order file until the original is returned (table I).

b. When the original and duplicate copies are received in shops, plants, and the like, jobs are assigned. The person assigned the work takes the duplicate copy, his authority to draw materials from the warehouse and accomplish the work. When the job is completed, the duplicate is returned to the shop. The foreman writes date completed on the original copy, initials, and returns it to the post engineer office. The duplicate remains in the shop.

c. When the completed original is returned to the post engineer office, the triplicate is withdrawn from the incompleted file, compared with the original, completion date noted thereon, and filed in a completed file in work-order number sequence. The original copy is forwarded to the cost section for review of assigned account code.

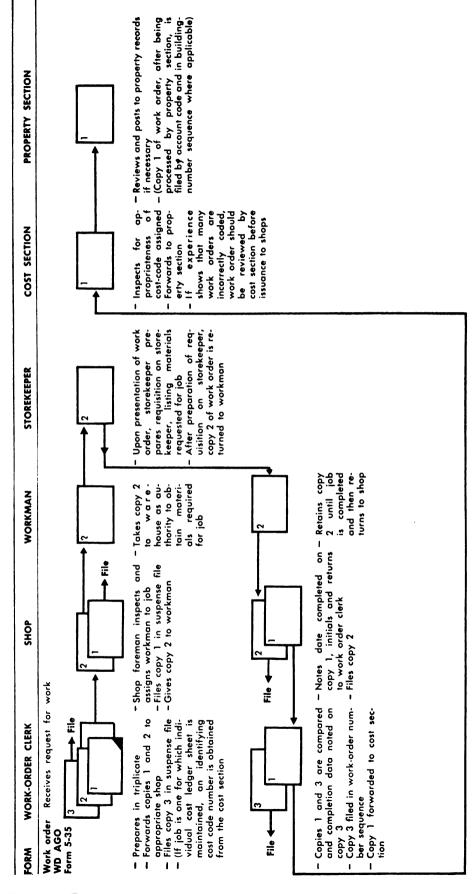
or review of assigned account code.

Note. If experience shows that numerous errors are made in assigning account codes, work orders should be reviewed by the cost section before orders are distributed to shops. All completed work orders go from the cost section to the property section for recording when necessary on real and installed property records. Original copies of work orders are then filed by account code and in building-number sequence where applicable.

Table I. Flow chart for WD AGO Form 5-35.

FLOW CHART

WORK ORDER



CHAPTER 3

LABOR

12. Basis for Labor Costs

All labor is priced according to procedures and rates given in this manual (tables II and III).

a. Civilian labor costs are based on locally ap-

proved rate for each employee as follows:

(1) For per-annum employees, hourly rates based on a 40-hour week plus overtime in accordance with current regulations.

(2) For per-diem employees, approved hourly

wage rate established for each employee.

b. Labor by enlisted personnel, general prisoners, and prisoners of war is based on the applicable, established civilian rate for the positions filled. Overtime rates are not applied, regardless of number of hours employed.

13. Daily Labor Report

Daily labor cost reports, WD AGO Form 5-100 (fig. 2) are compiled by each person in charge of shops, crews, or labor gangs. Work performed by enlisted personnel, general prisoners, and prisoners of war is recorded on separate WD AGO Forms 5-100. Procedure for completing the daily labor

report follows.

a. Before Leaving Post Engineer Office. The number of the report is inserted in the space REPORT NUMBER. In the space marked NAME OF SHOP, the shop or crew reporting is inserted, such as carpenter shop, general labor crew, and so on. Under NAMES are listed names of all employees assigned to each individual shop, including any employee on sick leave, annual leave, or leave without pay. To insure accounting for all personnel, this information is typed on WD AGO Forms 5-100 by the post engineer office before forms are forwarded to applicable shops.

b. Shop or Labor-crew Foreman. On completion of each day's work, shop or labor-crew foremen record the following on WD AGO Form

5-100:

(1) Under TOTAL HOURS are shown total hours worked by each individual on the day covered by the report. If an employee is on annual leave, AL is noted under TOTAL HOURS. Sick leave is reported in the same manner by SL and

absent without pay by AWOP.

(2) Under COST ACCOUNT CODE AND WORK ORDER NUMBERS, each person's time is distributed according to the account-code numbers shown on the work orders on which he worked during the day. Hours only are reported by the shop or crew foreman. Overtime in hours is entered for per-diem employees according to

current civilian personnel regulations. On the line directly over HR and AMOUNT, account numbers such as 610-11, 635-10, 661-10, and the like are shown. Work-order numbers applicable to each account-code number (shown on work orders) are listed at the top of each column directly above the account-code number. Hours of labor expended on work orders having the same account-code number are accumulated in one column headed by account-code number, except that labor performed on each project requiring individual job costs is recorded in a separate column, headed as indicated on work order.

(3) Daily labor reports for work by enlisted personnel, general prisoners, and prisoners of war need not include names of personnel. The total number of personnel, total hours of work, and hours of labor distributed to applicable accountcode numbers are shown for each type of labor, such as carpenter, mason, laborer, and the like.

(4) The shop or crew foreman signs his name in the space provided and submits reports to the

post engineer office daily.

c. AFTER RETURN TO POST ENGINEER OFFICE. As daily labor reports are received in the cost section from shop and labor crew foremen, wage rate of each employee is inserted in the RATE The cost of labor distributed under column. COST ACCOUNTS AND WORK ORDER NUMBERS is computed and shown in the AMOUNT columns.

(1) Per-annum employees' time is priced at the applicable hourly wage rate, based on a 40-hour week. Overtime worked in accordance with current regulations is priced at authorized rates

(table III).

(2) Per-diem employees' time is priced on the daily labor report by applying the approved hourly wage rate to the hours worked under each accountcode number. Overtime is computed in accordance with current civilian personnel regulations. Overtime is computed at one and one-half times the normal hourly wage rate.

(3) Annual- and sick-leave costs are recorded at the same rate as if the employee were working.

(4) Daily labor reports covering enlisted personnel, general prisoners, and prisoners of war are priced according to rates established in paragraph 12b.

(5) The columns under COST ACCOUNT CODE AND WORK ORDER NUMBERS are added down and across in both hours and amount. The total hours recorded on WD AGO Forms 5-100 for civilian employees are then reconciled

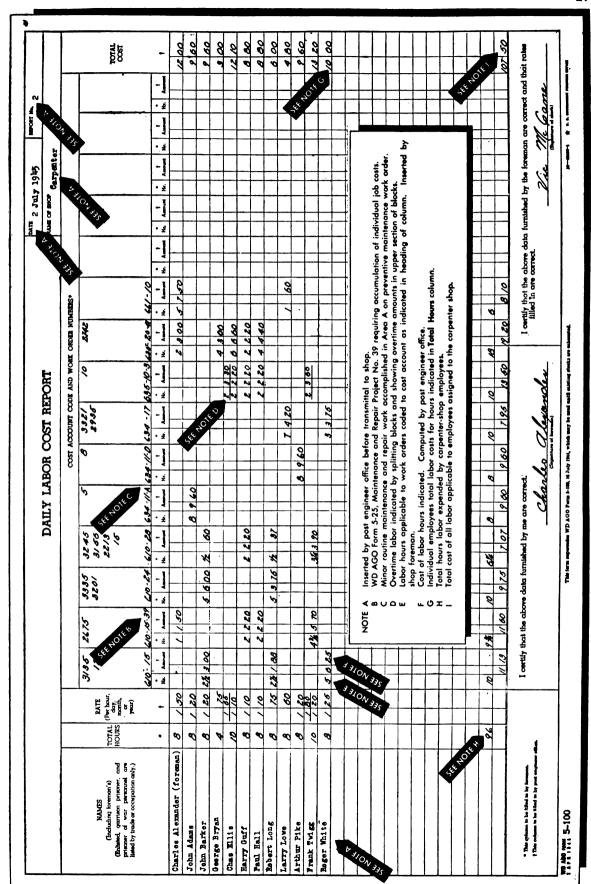


Figure 2. WD AGO Form 5-100 (Daily Labor Cost Report).

6

29 Sep 45 TM 5-602

with the total time recorded for the same day on the civilian personnel time and attendance report.

14. Summary of Labor Distribution

a. Summary of Distribution (WD AGO Form 5-101) (fig. 3), accumulates by account-code number the labor costs taken from daily labor reports. To permit reconcilement with applicable payrolls, separate WD AGO Forms 5-101 are maintained for:

Per-annum employees.
 Per-diem employees.

(3) Free labor (enlisted personnel, general

prisoners, and prisoners of war).

b. Individual WD AGO Forms 5-101 are prepared for each pay-roll period and for fractional parts of a period when the end of a month falls within a pay-roll period. The total amount summarized for the fractional part coming at the end of a month is carried forward as a memorandum figure to the WD AGO Form 5-101 covering the rest of the pay-roll period and is included in the total for reconcilement with the applicable pay-roll. WD AGO Forms 5-101 covering free labor are totaled semimonthly and recorded in the cost ledger.

c. The heading of WD AGO Form 5-101 is made to read SUMMARY OF DISTRIBUTION OF LABOR. In the columns under WORK ACCOUNTS, applicable account-code numbers are noted. A separate column is established for each account-code number applicable to work per-

formed.

d. Each day's completed daily labor reports are recapitulated by account-code numbers and recorded in the proper columns on summary of distribution of labor. A separate line is used each day.

- e. After posting to WD AGO Form 5-101 is completed, the amount columns are added down and across to establish a total and to insure accurate tabulation.
- f. At the end of each pay-roll period, the personnel office is notified of the cost of work performed by repairs and utilities employees approved for payment from other than repairs and utilities funds so proper distribution of fund charges can be made on pay-roll vouchers.

15. Reconciling Labor Cost with Pay Roll

On receipt of information from the fiscal officer as to the amount expended (together with applicable allotments under which expended) on each payroll voucher pertaining to repairs and utilities employees, labor costs recorded on WD AGO Forms 5-101 are reconciled for applicable payroll periods (figs. 4 and 5).

16. Recording

All labor costs are recorded in cost records for the month during which the costs are incurred. Cost-distribution vouchers (WD AGO Form 5-112 for repairs and utilities civilian employees and WD AGO Form 5-114 for other personnel engaged in repairs and utilities work but not paid from repairs and utilities funds) are prepared for each summary of distribution of labor, WD AGO Form 5-101 (par. 34). Debit charges for labor are noted on WD AGO Forms 5-112 and 5-114 in total only and postings to the cost ledger are made from WD AGO Form 5-101. All credit entries are noted on cost-distribution vouchers. WD AGO Forms 5-101 are attached to applicable WD AGO Forms 5-112 and 5-114.



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\$															
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¥	5.75	124,50					8.36		11.60	13.60		8558	15:86	6.60	354.56
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Plgure S. WD AGO Form 5–101 (Summary of Distribution).

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Figure 4. Advice of pay-roll disbursement from more than one fund.

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9				-515h	63.05	18.37		45.36	17.60	660			8610	8.10	273.34
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Pigure S. WD AGO Form 5–101 (Summary of Distribution).

NOTE: In this illustration, the amount costed is in exact agreement with total of funds disbursed, by buts the amount of \$20.00 deducted from the solaries of repairs and utilities employees for quarters. However, the total of these amounts may vary with the amount costed due to fractional rates. When this occurs, the difference is to be distributed by debit or credit as applicable to various accounts 610-11 through 570-00 on related WD AGO form \$-114.	
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Pigure 4. Advice of pay-roll disbursement from more than one fund.

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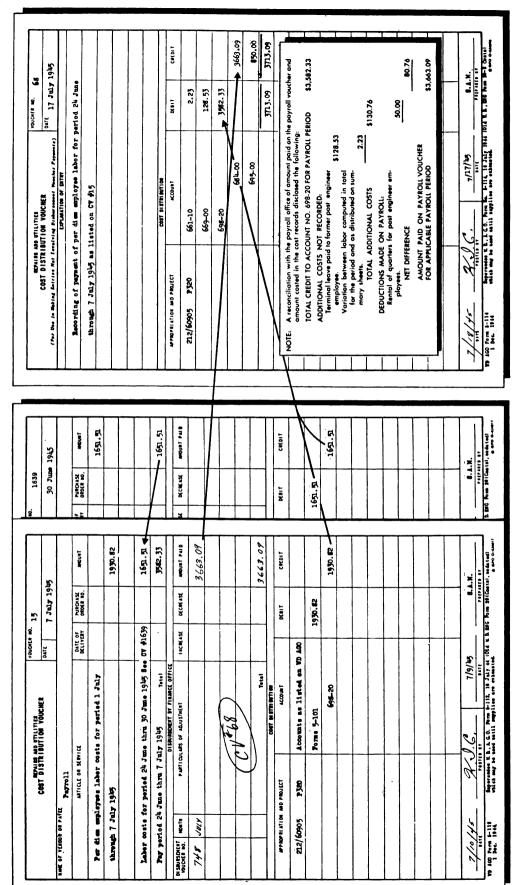


Figure 5. Reconciliation of labor costs with paid pay roll and summary for posting to cost ledger.

Table II. Flow chart for WD AGO Form 5-100.

FLOW CHART

DAILY LABOR COST REPORT

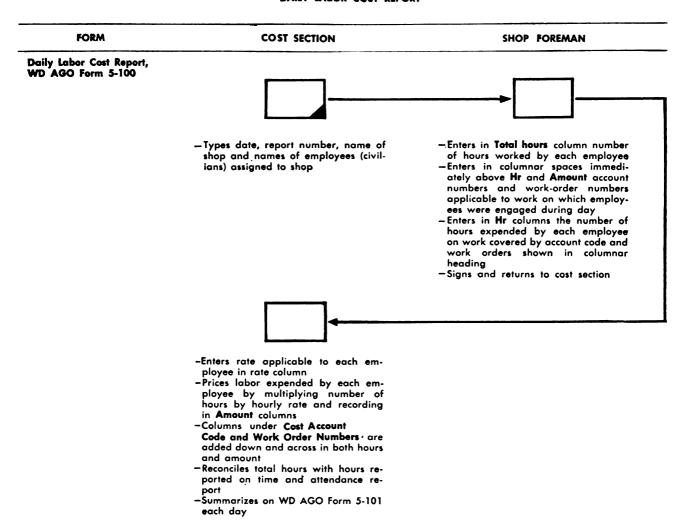


Table III. Cost rates, per annum employees.

COST RATES PER ANNUM EMPLOYEES
(Based on approved salary tables)

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4. 3.00	RY	HOURLY	DAILY	HOURLY	4 HOURS	8 HOURS	SALARY	REGULAR SALAR		TOTAL	REGULAR SALARY		TOTAL	SALARY
4.5 3.86 6.6 2.70 8.40 70. 8.60 6.41 9.60 6.41 9.60 6.41 9.60 6.41 9.60 6.41 9.60 6.41 9.60 6.41 9.60 6.41 9.60 6.42 9.60 9.		42	3.32	.62	2.49	4.98	720.	33 23	4 08	38.21	23 23	0.07	49.90	70
4.15 6.25 4.25 4.15 4.15 4.15 6.25 4.25 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.15 6.25 4.25 6.25 <td< td=""><td></td><td>45</td><td>3.60</td><td>89</td><td>2.70</td><td>5.40</td><td>780.</td><td>36.00</td><td>5.40</td><td>41 40</td><td>36.00</td><td>08.01</td><td>44.90</td><td>8 8</td></td<>		45	3.60	89	2.70	5.40	780.	36.00	5.40	41 40	36.00	08.01	44.90	8 8
5.5 4.5 7.5 4.5 9.0 4.5 6.5 9.0 4.5 6.5 9.0 4.5 9.5 4.5 9.5 4.5 9.5 4.5 9.5 4.5 9.5 4.5 9.5 4.5 9.5 <td></td> <td>48</td> <td>3.88</td> <td>73</td> <td>2.90</td> <td>5.83</td> <td>840</td> <td>38 76</td> <td>5 83</td> <td>44 58</td> <td>38.76</td> <td>11.44</td> <td>10.00</td> <td>2 8</td>		48	3.88	73	2.90	5.83	840	38 76	5 83	44 58	38.76	11.44	10.00	2 8
5.2 4.45 1.65 4.45 6.65 4.45 6.65 4.45 6.65 4.45 6.65 4.45 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65 6.65 1.65		2	4.15	4	-11.	7 22	0	2 17	7 22	17.74	41.50		20.40	3
65 5.54 156 4.75 8.79 1.00 6.25 1.00 1.00 1.00 6.25 1.00 6.			4.43	. 6	2 33	4 45	090	24.30	477	20.03	20.17	75.00	35	3
77 650 136		6	2	9 5	4.15	6.0	200	25.47	9 6	20.73	25.47	3.30	20.70	1,152.
7,7 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,67 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 6,57 11,73 11,73 6,57 11,73 11,73 6,57 11,73		6.6			2 .	200		99.99		65.00	22.38	70.07	72.00	4
7.9 6.05 1.11 4.72 9.05 1.20 9.05 1.05		7,7	6.74	5.5	4.5	0.00	7,200	27.75	0.00	00.00	57.92	17.38	75.30	1,506.
17. 6.25 11.18 4.72 9.43 1,380 65.00 9.43 1,380 65.00 9.43 1,380 65.00 9.44 1,380 65.00 1,380 65.00 1,380 1,380 1,380 1,480 9.43 1,480 65.00 1,480 9.43 9.43 9.43 9.43 9.43 9.43 9.43 9.43 9.43 9.43 <th< td=""><td></td><td>?</td><td>6.6</td><td>2 :</td><td>4.53</td><td>7.0</td><td>.920.</td><td>90.40</td><td>7.0</td><td>04.33</td><td>90.40</td><td>18.14</td><td>78.60</td><td>1,57</td></th<>		?	6.6	2 :	4.53	7.0	.920.	90.40	7.0	04.33	90.40	18.14	78.60	1,57
45 6.55 12.2 4,91 9,83 1,440 66.35 9,83 7,83 66.35 19,47 20,41 1,24 9,83 1,440 66.35 9,83 1,640 70,61 10,18 10,47 8,11 70,61 11,18 10,47 8,11 70,61 11,18 10,47 8,11 70,61 11,18 10,47 8,11 70,61 11,18 10,47 8,11 70,61 11,18 10,47 8,11 70,61 11,18 10,48 9,22 70,61 11,18 10,48 9,22 70,61 11,18 10,18 10,11 9,12 11,18 10,18 10,11 <		6.	6.30	1.18	4.72	9.45	1,380.	63.00	9.45	72.45	63.00	18.90	81.90	1,638.
85 6.81 1.28 5.10 10.21 1.500 6.64 10.21 70.42 10.20 70.43<	_	.82	6.55	1.23	16.4	9.83	1,440.	65.53	9.83	75.36	65.53	19.67	85.20	1.70
18 7.06 1.32 5.59 10.59 7.04 1.35 7.04 1.31 5.10 7.11 7.11 7.11 7.11 7.12	_	.85	6.81	1.28	5.10	10.21	1,500.	68.07	10.21	78.28	68.07	20.43	88.50	177
91 7.22 1.37 5.44 1 (07) 7.31 1 (07) 7.31 1 (07) 7.31 1 (07) 7.31 1 (07) 7.31 1 (07) 7.31 1 (07) 7.31 1 (07) 7.32 1 (13) 6.05 1 (14) 5.74 1 (14) 7.31 1 (14) 7.31 1 (14) 7.32 1 (14) 7.32 1 (14) 7.32 1 (14) 7.32 1 (14) 7.32 1 (14) 8.32 1 (14) 7.32 1 (14		8	7.06	1 33	5 20	10.50	1 560	70.61	10.50	00 18	1902	91 10	00.00	200
91 7,572 1,47 5,470 1,47 5,470 1,47 5,470 1,47 5,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470<		6 6	3.5		40	10.01	200	10.05	100	27.10	10.00	21.17	00.10	3
35 7,50 144 5.50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 11.45 1700 7,50 12.75 1700 7,50 12.75 1700 7,50 12.75 1700 7,50 12.75 1700 7,50 12.75 1700		5.	7.32	15.	0.40	10.97	.,020.	73.13	20.5	21.12	/3.15	21.95	95.10	06,1
96 762 144 574 1148 1770 76.33 11.48 91.00 76.33 12.79 76.33 12.79 76.33 12.79 76.33 12.79 76.33 12.79 76.33 12.79 76.33 12.79 76.34 12.79		.95	1.57	7.47	2.0	33	.080.	/3.09	35	40.78	75.09	777	98.40	1,968
10	<u>.</u>	96:	7.65	4	5.74	11.48	1,700.	76.53	11.48	88.01	76.53	22.97	99.50	1,990
1,01 8,08 1,51 6,05 1,212 1,800 8,076 12,12 9,580 8,500 25,500 15,000 8,580 12,75 1,990 8,580 12,75 9,580 8,590 12,5	_	86:	7.82	1.47	5.86	11.73	1,740.	78.23	11.73	89.96	78.23	23.47	101.70	2,034
1,04 8,33 1,56 6,24 12,30 1,900, 85,00 12,50 97,50 85,00 25,50 15,00 15,60 15,60 15,60 15,60 12,60 1		1.01	8.08	1.51	6.05	12.12	1,800.	80.76	12.12	92.88	80.76	24.24	105.00	2,100
1,00 6.50 1.59 6.47 12.75 1.900, 88.50 12.75 88.50 25.50 1,00 8.58 1.64 6.62 13.26 1.920, 88.50 12.88 88.50 25.50 1,11 8.52 1.65 6.62 13.26 1.920, 88.50 12.88 88.50 25.50 1,12 8.52 1.75 6.81 13.46 2.000, 88.50 13.28 101.64 88.38 2.625 1,12 8.52 1.75 6.81 13.46 2.000, 88.28 13.28 101.64 88.38 2.625 1,12 8.52 1.75 2.00 14.00 2.100, 99.20 13.48 102.48 99.22 1,12 9.52 1.75 2.00 14.00 2.100, 99.20 14.00 10.48 1,12 9.57 1.83 7.32 14.45 2.200, 99.26 14.40 110.49 99.20 1,13 10.61 1.91 7.64 15.29 2.200, 10.61 13.20 117.21 10.19 1,14 1.18 2.17 2.19 8.37 16.45 2.200, 10.61 13.80 11.46 1,18 2.11 8.43 1.67 2.00 13.28 13.20 13.40 1,19 1.10 2.00 8.35 16.47 2.000, 112.20 16.41 13.80 114.61 1,19 1.10 2.00 8.31 1.00 13.20 14.42 13.80 13.40 1,15 1.10 2.00 8.31 1.00 13.24 14.40 13.20 13.40 1,10 1.11 2.00 8.31 1.00 13.24 14.40 13.20 13.40 1,10 1.11 2.00 8.31 1.00 13.24 14.40 13.20 13.40 1,10 1.11 2.00 8.31 1.00 13.24 14.40 13.20 13.40 1,10 1.11 2.00 8.31 1.00 13.24 14.40 13.20 13.40 1,10 1.11 2.00 8.31 1.40 13.20 14.40 13.20 14.40 1,10 1.11 2.00 8.31 1.40 1.40 1.40 1.40 1.40 1,10 1.11		1.04	8.33	1.56	6.24	12.50	1,860.	83.30	12.50	95.80	83,30	25.00	108.30	2.166
1,00 8.84 164 644 128 1970 88.84 128 1970 88.84 128 1970 88.84 128 1970 88.84 128 1970 128 1970 128 1970 128 1970 128 1970 128 1970 1		70	8.50	1.50	6.37	12.75	1.900	85.00	12.75	97.75	85.00	25.50	110 50	2 2 10
1,00 8,44		20.	8 58	141	6.43	12.88	1 020	85.84	12.88	98 73	85.84	25.76	07 111	
11.0 8.92 1.57 6.66 13.38 2,000 85.23 13.38 102.61 102.61 102.62 12.28 12.29			70 0	77.	64.4	12.04	1 080	00 00	13.96	101	0000	27.63		200
1,		25	0.0	9.	70.0	25.50	.,,,,,,	00.00	25.50	10.00	99.30	70.07	25.50	2,29
1,14 9,05 1,70 0,81 1,204 2,040. 9,027 1,204 1,004	٠.	7::	8.92	9	0.0	2.50	2,000	84.73	13.30	107.01	89.73	70.77	800	2,320.
1, 1, 2, 3, 3, 1, 1, 2, 2, 0.0 14,02 2,100. 93,46 14,02 10,748 943,46 288,04 1,10 94,05 94,05 1,10 94,05 1,10 94,05 1,10 94,05 1,10 94,05 1,10 94,05 1,10 94,05 1,10 94,05 1,10 94,05 94,05 1,10 94,05		4 !	60.6	0.1	9.8	3.04	2,040.	90.92	3.04	04.50	90.92	27.28	118.20	2,36
1.20 9.56 1.80 7.20 1.440 9.600 14.40 11040 96.600 28.80 1.20 9.56 1.80 7.20 1.440 2.200 9.845 11.20 9.640 2.880 1.20 9.85 1.85 7.39 1.45 2.200 9.845 11.20 1.91 1.91 7.44 1.52 2.200 9.845 11.20 11.20 1.91 7.44 1.52 2.200 10.415 15.22 1.207 10.15 1.92 1.207 10.15 1.207 10.15 1.207 10.15 1.207 10.15 1.207 11.84 1.207 1.207 1.207 1.207 11.84 1.207 1.207 11.84 1.207 1.207 11.84 1.207 1.207 11.84 1.207 11.84 1.207 11.84 1.207 1.207 11.84 1.207	<u>.</u>	1.17	9.35	1.75	7.00	14.02	2,100.	93.46	14.02	107.48	93.46	28.04	121.50	2,43
1,22 9,77 183 7,32 14,65 2,200 97,69 14,65 112,34 97,69 29,31 11,34 11,34 97,69 29,31 11,33 11,34	٠.	1.20	9.60	1.80	7.20	14.40	2,160.	96.00	14.40	110.40	96.00	28.80	124.80	2,49
1,23 9,85 185 7,59 14,78 2,220, 98,53 14,78 113,31 98,53 29,57 113,31 113,31 98,53 30,58 113,31 1	ď	1.22	4.77	1.83	7.32	14.65	2,200.	69.76	14.65	112.34	67.69	29.31	127.00	2,540.
1.27 10.19 1.52 2.300 10.192 15.29 117.21 100.192 30.58 1.38 11.062 1.99 7.96 15.92 2.300 106.15 15.29 117.21 106.15 30.58 1.38 11.06 2.07 8.27 16.56 2,500 110.38 15.29 11.46 31.58 31.25 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.59 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.59 31.59 31.59 31.59 31.59 31.59 31.59 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.58 31.59 31.59 31.59 31.59 31.59 31.59 31.59 31.59<	~	1.23	9.85	1.85	7.39	14.78	2,220.	98.53	14.78	113.31	98.53	29.57	128.10	2,562.
133 10.62 1.99 7.96 15.92 2,400 106.15 15.92 122.07 106.15 31.85 1.38 11.04 2.07 8.27 16.56 2,500 114.61 17.03 116.84 110.38 33.12 1.49 11.88 2.13 8.51 17.03 2,500 118.84 17.03 118.84 10.33 33.12 1.54 11.28 2.13 8.51 16.71 2,500 118.84 17.03 118.84 116.94 34.09 1.54 12.73 2.01 8.27 16.74 2,900 127.30 16.71 13.94 13.74 14.00 114.41 12.30 114.61 13.30 114.62 32.04 11.64 114.00 114.23 13.30 114.61 12.30 114.62 32.07 14.23 14.00 12.30 114.63 32.04 12.30 114.43 32.04 12.30 114.64 32.04 12.30 114.64 32.07 12.44 32.04 <td>6</td> <td>1.27</td> <td>10.19</td> <td>1.91</td> <td>7.64</td> <td>15.29</td> <td>2,300.</td> <td>101.92</td> <td>15.29</td> <td>117.21</td> <td>101.92</td> <td>30.58</td> <td>132.50</td> <td>2,650.</td>	6	1.27	10.19	1.91	7.64	15.29	2,300.	101.92	15.29	117.21	101.92	30.58	132.50	2,650.
138 11.04 2.07 8.27 16.56 2,500 110.38 16.56 126.94 110.38 33.12 1.43 11.64 2.07 8.27 16.56 2,500 114.61 17.19 131.80 114.61 34.39 1.44 11.84 2.13 8.37 16.87 2,800 123.07 18.84 34.39 1.54 12.31 2.11 8.43 16.54 2,900 123.07 18.87 118.84 34.00 1.54 13.15 2.07 8.27 16.24 3,000 16.23 16.21 144.01 127.30 33.44 1.75 14.60 2.07 8.27 16.24 3,000 144.23 16.21 144.01 127.30 33.44 1.76 13.58 2.06 14.00 16.21 144.01 127.30 32.76 33.00 1.86 14.60 14.00 14.21 14.00 144.23 32.76 32.76 32.76 32.76 32.76 <td></td> <td>1.33</td> <td>10.62</td> <td>1 90</td> <td>7.96</td> <td>15.92</td> <td>2.400</td> <td>106.15</td> <td>15.92</td> <td>122.07</td> <td>106.15</td> <td>31.85</td> <td>138.00</td> <td>2.76</td>		1.33	10.62	1 90	7.96	15.92	2.400	106.15	15.92	122.07	106.15	31.85	138.00	2.76
1,43 11,46 2,15 8,59 17,19 2,600 114,61 17,19 131,80 114,61 34,39 1,49 11,88 2,13 8,51 17,03 2,700 118,64 17,03 11,146 34,39 1,49 11,88 2,13 8,43 16,54 2,900 127,30 16,71 14,401 17,33 14,60 1,59 12,73 2,09 8,73 16,54 3,000 16,23 16,21 13,09 1,75 14,00 2,03 8,19 16,22 3,000 16,21 16,21 13,09 1,75 14,00 2,03 8,19 16,22 3,000 16,21 16,21 13,09 1,75 14,00 2,03 8,10 16,22 3,000 16,21 16,22 10,00 14,423 16,23 13,13 1,86 1,42 1,42 16,24 1,400 16,43 16,43 11,43 13,14 1,86 1,53 1,5		1.38	11.04	207	8.27	16.56	2.500	110.38	16.56	126.94	110.38	33.12	143.50	2.870
1,49 11,88 2.13 8.51 17,03 2,700 118.84 17,03 135.87 118.84 34,06 12,31 2.11 8.43 16.87 2,800 13.07 16.87 139.94 123.07 33,74 13.15 2.09 8.25 16.71 2,900 131.53 16.55 144.01 127.30 33,74 13.15 13.58 2.07 8.25 16.54 3,000 131.53 16.55 144.01 17,33 33,74 13.57 13.15 13.24 13.25 33,74 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 13.24 13.25 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.23 144.24 144.24 144.23 144.24		1 43	11 46	21.6	8 50	17.10	2,600	114.61	17.10	131.80	11461	34 30	140 00	2 08
1.55 12.33 2.11 8.43 16.87 2,800. 123.07 16.87 139.94 123.07 133.74 13.95 13.75 14.00 127.30 13.75 13.75 14.00 127.30 13.75 14.00 127.30 13.75 14.00 127.30 13.75 14.00 13.76 13.75 14.00 13.76 13.75 14.00 13.76 13.75 14.00 13.76 13.75 14.00 13.76 13.75 14.00 13.76 13.76 13.76 14.00 13.76 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 14.23 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 14.00 13.78 13.78 13.84 13.78 13.84 13.78 13.84 14.75		1 40	11 88	213	8 51	17.03	2 700	118.84	17.03	135.87	118 84	34.04	152 90	200
1.55 12.71 2.07 8.35 16.71 2.900 13.53 16.55 148.08 131.53 33.47 13.50 13.57 15.40 13.50 13.57 14.57				2 :	6.43	14.97	200	192.07	14.07	130.00	123.07	20.00	16, 91	600
1.57 1.1.5 2.07 6.25 16.71 2.00 131.55 16.25 148.08 131.55 131			12.3		2 0	16.71	2,000	127.20	14.71	14.6	107.00	47.50	10.00	2,0
1,04 13.15 2.07 8.27 16.54 5,000 13.153 142.08 131.53 133.53 33.09 1,04 13.15 2.07 8.27 16.24 5,000 13.153 142.08 131.53 33.09 1,05 14.02 2.05 8.19 16.22 3,200 144.23 16.05 16.028 144.23 32.11 1,86 14.85 1.99 7.94 15.89 3,400 148.46 15.89 164.35 148.46 31.78 1,96 14.85 1.97 7.86 15.73 3,500 15.692 15.73 168.42 15.692 31.13 1,96 15.69 1.95 7.78 15.57 3,500 15.692 15.79 164.35 164.35 164.35 11.13 1,96 1.95 7.70 15.41 3,700 16.15 15.40 16.692 165.69 30.81 2,07 16.54 1.91 7.62 15.24 3,500 165.38 15.24 180.62 165.63 30.81 2,17 17.38 1.86 7.45 14.72 4,000 173.84 14.92 184.69 192.83 178.07 29.34 2,23 17.81 1.84 7.37 14.75 4,000 173.84 14.92 184.69 192.83 178.07 29.34 2,24 19.08 1.78 7.13 14.27 4,400 190.76 192.83 190.76 22.38 2,49 19.02 1.74 6,97 13.94 4,600 199.23 13.17 199.23 27.27 2,49 20.73 1.63 6,50 13.01 5,200 22.34 13.71 199.23 22.84 2,79 2,23 1.63 6,50 13.01 5,200 22.34 13.71 13.63 22.64 2,89 2,90 2.31 3.15 1.55 5,400 23.14 13.71 13.63 22.84 2,89 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 2,90 3,90 3,90 3,90 3,90 3,90 4,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 3,90 5,90 3,90 3,90 5,90 3,90 3,90 5,90 3,90 3,90 5,90 3,90 3,90 5,90 3,90 3,90		6	12.73	2.03	0.30	10.	2,900	05.77		144.0	27.30	33.4	100.7	5,0
1,70 13.58 2.05 8.19 16.38 3,100. 135.70 16.38 152.14 135.76 32.76 1,75 14,00 2.03 8.10 16.22 3,200. 140.00 16.21 140.00 32.76 1,86 14,42 2.01 8.02 16.02 3,200. 144.23 16.02 148.40 32.76 1,86 14,82 1.99 7.94 15.89 3,400. 15.89 16.435 148.42 32.11 1,96 15.27 1.95 7.78 15.57 3,600. 15.59 15.59 15.69 31.18 2,01 16.12 1.91 7.62 15.24 3,600. 165.38 15.57 17.49 16.69 31.13 2,07 16.54 1.91 7.62 15.24 3,800. 165.38 18.69 16.51 30.49 2,17 1.53 1.86 7.45 15.08 3,900. 16.53 18.46 16.53 17.24 16.54	·	49.	13.15	2.07	8.27	10.54	3,000.	131.53	10.55	148.08	131.53	33.09	164.62	3,47
1.75 14,00 2.03 8.10 16,22 3,200 140,00 156,21 140,00 32,43 1.80 14,42 2.01 8.02 16,06 3,300 144,23 16,05 144,23 32,11 1.80 14,48 1.97 7.94 15,89 3,400 15,29 164,35 148,46 31,78 1.91 1.57 1.97 7.78 15,57 3,500 15,59 16,43 16,44 31,78 1.96 1.97 7.78 15,57 3,500 16,69 15,57 16,49 16,49 16,69 31,49 2.07 16,54 1.91 7.62 15,24 3,700 16,115 15,49 16,49 16,69 30,49 2.07 16,54 1.91 7.62 15,08 3,900 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66 16,66	~	1.70	13.58	2.05	8.19	16.38	3,100.	135.76	10.38	152.14	135.76	32.76	168.52	3,53
1.80 14.42 2.01 8.02 16.06 3,300. 144.23 16.05 16.028 144.23 32.11 1.86 14.85 1,99 7.94 15.89 3,400. 148.46 15.89 16.05 144.23 32.11 1.91 15.27 1,99 7.70 15.73 3,400. 15.69 15.24 31.46 31.78 15.26 31.18 31.78 <td>ä</td> <td>1.75</td> <td>14.00</td> <td>2.03</td> <td>8.10</td> <td>16.22</td> <td>3,200.</td> <td>140.00</td> <td>16.21</td> <td>156.21</td> <td>140.00</td> <td>32.43</td> <td>172.43</td> <td>e Ž</td>	ä	1.75	14.00	2.03	8.10	16.22	3,200.	140.00	16.21	156.21	140.00	32.43	172.43	e Ž
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1.91 15.27 1.97 7.86 15.73 3,500. 152.69 15.73 168.42 152.69 31.46 1.96 15.69 1.95 7.78 15.57 3,600. 156.92 15.57 172.49 156.92 31.13 1.96 15.69 1.93 7.70 15.24 3,700. 161.15 15.40 176.55 161.15 30.81 2.01 16.14 1.91 7.62 15.24 3,700. 165.38 15.44 186.62 165.92 30.14 2.17 16.96 1.89 7.54 15.08 3,900. 169.61 15.08 184.69 169.61 30.16 2.18 17.38 1.86 7.45 14.92 4,100. 173.84 14.92 188.76 173.84 29.84 2.19 17.38 1.82 7.29 14.59 4,100. 178.07 14.76 19.89 178.07 29.51 2.28 19.08 1.78 7.13 14.27 4,400. 190.76 14.27 205.03 190.76 28.54 2.49 19.92 1.74 6.97 13.94 4,600. 190.76 13.94 207.30 27.27 2.49 19.92 1.70 6.81 13.63 5,000. 215.38 13.32 228.70 215.38 26.65 2.79 22.35 1.63 6.50 13.01 5,200. 223.46 13.01 236.47 223.46 237.00 2.79 22.35 1.65 6.50 13.01 5,200. 223.46 13.71 12.39 224.42 231.53 237.07 2.70 2.70 2.70 2.70 23.64 23.70 2.70 2.70 2.70 23.70 23.70 2.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70 23.70 2.70 23.70	ď	1.86	14.85	1.99	7.94	15.89	3,400.	148.46	15.89	164.35	148.46	31.78	180.24	3,86
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201 16.12 1.93 7.70 15.41 3,700. 161.15 15.40 176.55 161.15 30.81 207 16.54 1.91 7.62 15.24 3,800. 165.38 15.24 169.61 30.49 2.12 16.56 1.89 7.54 15.24 3,800. 166.61 16.65 165.38 30.49 2.17 17.81 1.86 7.45 14.59 4,000. 178.07 14.76 192.83 178.07 29.84 2.28 18.23 1.86 7.37 14.76 4,100. 178.07 14.76 192.83 178.07 29.84 2.28 18.23 1.82 7.29 14.59 4,200. 182.30 14.60 196.90 182.30 29.19 2.38 19.08 1.78 7.13 14.27 4,400. 190.76 13.94 207.30 208.03 190.76 27.27 2.59 20.73 1.54 4,400. 199.74 228.70 <td< td=""><td>6</td><td>1.96</td><td>15.69</td><td>1.95</td><td>7.78</td><td>15.57</td><td>3,600.</td><td>156.92</td><td>15.57</td><td>172.49</td><td>156.92</td><td>31.13</td><td>188.05</td><td>4.08</td></td<>	6	1.96	15.69	1.95	7.78	15.57	3,600.	156.92	15.57	172.49	156.92	31.13	188.05	4.08
2.07 16.54 1.91 7.62 15.24 3,800. 165.38 15.24 180.62 165.38 30.49 2.12 16.96 1.89 7.54 15.08 3,900. 169.61 15.08 184.69 169.61 30.16 2.17 17.38 1.86 7.45 14.92 4,000. 173.84 14.92 187.67 173.84 123.84 173.84 29.84 2.28 17.81 1.84 7.37 14.76 4,100. 178.07 14.66 196.90 182.30 29.19 2.38 19.08 1.78 7.13 14.27 4,400. 196.76 14.27 205.03 190.76 28.54 2.49 19.92 1.74 6,97 13.54 4,600. 199.23 13.94 213.77 199.23 27.27 2.59 20.73 1.70 6.81 13.63 4,600. 199.23 13.94 20.94 20.94 20.72 2.54 1.54 1.65		201	16.19	1.93	7.70	15.41	3.700.	161.15	15.40	176.55	161.15	30.81	191.96	4.19
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2.38 19,08 1,78 7,13 14,27 4,400. 199,23 13,94 203,03 190,23 203,04 201,05 203,04		2.78	18.23	1.82	7.79	14.59	4,200	182.30	14.00	196.90	182.30	23.19	211.49	
2.49 19,92 1,74 6,97 13,94 4,600. 197,23 213,17 199,23 22,188 2.59 20,73 1,70 6,81 13,63 4,800. 207,30 13,64 209,44 207,30 27,27 2.69 21,54 1,67 6,66 13,32 5,000. 215,38 13,32 228,70 215,38 26,65 2.79 22,35 1,63 6,50 13,01 5,200. 223,46 13,01 236,47 223,46 26,02 2.89 2,215 1,59 6,35 12,70 5,400. 231,53 244,24 231,53 23,43 2.60 1,57 2,600 230,61 12,71 244,24 231,53 23,54 2.60 1,57 2,500 230,61 12,71 244,24 231,53 23,54	ď	2.38	19.08	8/.1	7.13	14.27	4,400	90.70	77.	205.03	190.76	78.54	219.30	4,900.
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3 00 52 5 1 EE 6 10 19 30 E 600 239 61 17:30 55:00 54:70	ó	2.89	23.15	1.59	6.35	12.70	5,400.	231.53	12.71	244.24	231.53	25.41	256.94	6.020
3.00 23.96 1.35 0.17 12.39 5.000.	6	-												

CHAPTER 4

MATERIAL AND EQUIPMENT

Section I. GENERAL

17. Establishing Costs

a. Recording. Value of all property, both expendable and nonexpendable, is recorded in cost accounts when received, except for the following:

(1) Property received on memorandum receipt.

(2) Materials, equipment, repair parts, etc., furnished by another agency for performance of work by post engineer under the combined-shop

plan.

(3) Such materials, supplies, and equipment as office supplies and equipment, flashlight batteries, certain insecticides, and gas masks, assigned to other technical services for procurement and not chargeable to repairs and utilities (ESA) funds (exception, the cost of property is recorded when property normally procured with repairs and utilities funds is obtained from other services for use in repairs and utilities work).

b. Pricing. Property is priced according to

the following:

(1) Locally procured property is recorded at values shown on procuring documents less trade discounts, plus amount of taxes included in purchase if the taxes are legally payable by the

government.

(2) Centrally procured property is recorded at values shown on the War Department shipping document, WD AGO Form 450-5 B and C. Centrally procured coal is priced at cost per ton including the transportation charges indicated on coal contracts.

(3) Property received from excess stocks of another installation is priced at unit costs shown on War Department shipping document, WD AGO Form 450-5, unless such costs are unreasonably high or low and use of the data would distort inventory values. If distortion would occur, property is taken up at the current unit costs or at a fair estimate based on local market prices if no like items are stocked.

(4) Centrally procured mess equipment, and fuel and lubricants furnished by the Quartermaster for use in special-purpose vehicles and special equipment, evidenced by issue slips or delivery tickets, are recorded at values obtained from the

Quartermaster.

(5) Reclaimed property turned in to the warehouse, property found on the post, and property returned to stock because of previous over-issues is priced at the current average unit cost shown on stock-record cards. Paragraphs 26 and 27 contain

procedures for reclaimed property.

(6) The cost of property is not reduced by time discounts. When time discounts are obtained, credits therefore are posted to account 695–00 (par. 243).

(7) If the transportation of property by common carrier is chargeable to ESA funds, this cost is added to the property's value. Transportation costs are taken up in the cost records on an estimated basis (exception, par. 17b(2)).

18. Receipt of Property

Except as explained in paragraphs 17a and 18, the cost or value of all property received by the post engineer is debited to applicable inventory accounts. If property is expended on a certificate of expenditure in accordance with AR 35-6620, its cost is posted direct to applicable accounts and is not reflected in inventory accounts.

a. DISBURSEMENT ITEMS. When locally purchased property is received as evidenced by WD Form 383 or WD AGO Form 10-113, a cost-distribution voucher, WD AGO Form 5-112 is prepared (par 35a). The cost of property received is noted on WD AGO Form 5-112 as a debit to the applicable inventory account and a credit to account 698-10, except that property expended on a certificate of expenditure is noted on WD AGO Form 5-112 as a debit to the applicable direct-cost account and a credit to account 698-10.

b. Nondisbursement Items. When property is received for which post repairs and utilities funds is not to be expended, a cost-distribution voucher, WD AGO Form 5-114 (exception, 18b(3)) is prepared as prescribed in paragraph 35b. This property is recorded as a debit to the applicable inventory account, except property expended on a certificate of expenditure in accordance with TM 5-601 (when published). Then, the applicable direct-cost account is debited. Centrally procured property, property received from excess stocks, and property found on post is credited to the applicable account in the 699 series. Reclaimed property is credited to the applicable account prescribed in paragraphs 26 and 27. Receipt of such property is evidenced by the following:

(1) WD AGO Form 450-5-B and -C for centrally procured property and property received from excess stocks.

(2) WD AGO Form 444 for property found on post.

(3) WD AGO Form 5-102 or 5-103 for property reclaimed from buildings, structures, plants, and other facilities because of alterations, deletions, demolition, and the like and property returned to stock because of previous overissues. The value of such property is included in summary prescribed in paragraph 22, and preparation of individual WD AGO Forms 5-114 is not required.

19. Issue of Property

a. Property is issued from the warehouse as prescribed in TM 5-601 (when published). Quantities issued are priced at the average unit cost shown on stock-record cards. WD AGO Forms 5-102 and 5-103 (figs. 6 and 7), used for issuing property for maintenance and repair and construction work, are identified by consecutive requisition numbers. A check list of these numbers is maintained in the cost section. As requisitions are received, the numbers are checked off to insure that all requisitions are accounted for.

b. The cost (or value) of property issued from the warehouse for transfer as excess to another post or transfer to a central warehouse as recorded on shipping document WD AGO Form 450-5-B and -C and excess property turned in to the salvage officer on a turn-in slip, WD AGO Form 447, is recorded on WD AGO Form 5-114 as prescribed in paragraph 35 b.

c. Nonexpendable memorandum-receipt property issued on WD AGO Form 446 is retained in the inventory accounts.

20. Inventory Overages, Shortages, and Adjustments

Overages and shortages shown by physical inventory on inventory adjustment report, WD AGO Form 444, is recorded on WD AGO Form 5–114. If comparison of cost-accounting inventory balances with total values on stock records shows disagreement, the variance is recorded on WD AGO Form 5–114. The cost-record accounts affected by overages and shortages in inventory and adjustment of balances are accounts 682–10 through 682–90 (pars. 233 through 237).

21. Class P Property

TM 5-601 (when published) prescribes the forms and procedures for recording transactions affecting installed class P property. If the transaction is recorded on a debit or credit WD AGO Form 5-102 or 5-103, the property value is included in the summary prescribed in paragraph 22. If the transaction is recorded on other than WD AGO

				Req. No.	
REQUI	ISITION ON STOR	REKEEPER		Date	
	ISSUED	TO-		J	
Account Code No.	Work Order No.	Building or Facilit	7		
STOCK No.	ARTICLES	QUANTITY	UNIT.	UNIT PRICE	AMOUNT
				-	•••••••••••••••••••••••••••••••••••••••
	•				
Issued by (signature)		Received by (signature)			
WD AGO FORM 5-102	This form supersedes WD AGO Form 5	-102, 16 July 1944, which may be used	until existi	ng stocks are exha	asted.
	🖈 U. S. GOVERNMENT ANGETICE	orrics 10-44000-1			

Figure 6. WD AGO Form 5-102 (Requisition on Storekeeper).

DEC				Req. 1	¥o.
KEQ	OUISITION ON STO			Date	
account code No.	ISSUED Work order No.	Building or facility			
STOCK NUMBER	ARTICLES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	······				
	••••••				
	•••••••••••••••••••••••••••••••••••••••				
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Figure 7. WD AGO Form 5-103 (Requisition on Storekeeper).



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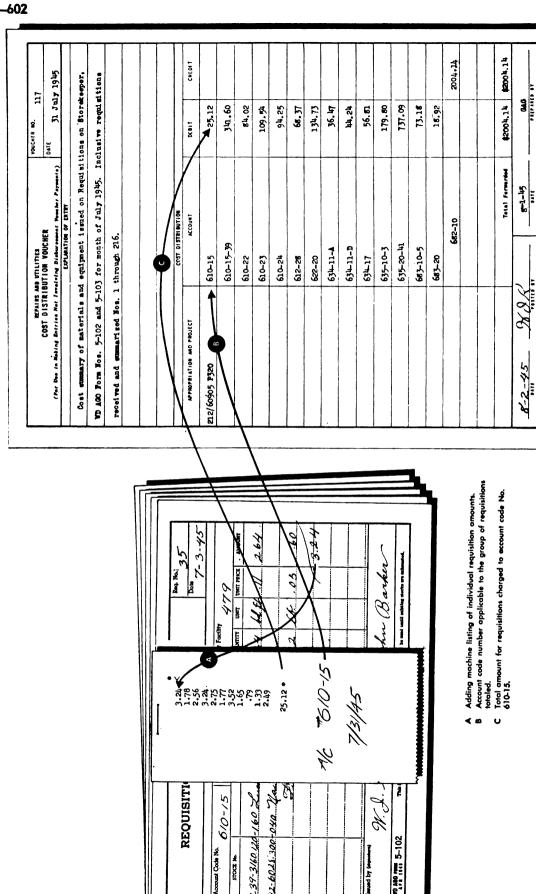


Figure 8. Summary of material and equipment costs.

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Forms 5-102 or 5-103, property value is recorded on an individual WD AGO Form 5-114. The accounts affected by the removal from installation of class P property are given in paragraph 25.

22. Summarizing Costs

a. As WD AGO Forms 5-102 and 5-103 are received in the cost section and the numbers accounted for in accordance with paragraph 19a, they are sorted by account codes and filed in a current file. Requisitions covering property returned to stock are filed with accounts to which the credits apply. At the close of the current month or oftener if desired, the requisitions are totaled by accounts and listed on cost-distribution voucher, WD AGO Form 5-114, as debits to the applicable accounts and credits to the appropriate inventory accounts. After all requisitions for the period are summarized and recorded on WD AGO Form 5-114 by account codes, an adding-machine tape is run on all requisitions; the total must agree with the total amount debited to account codes. WD AGO Forms 5-102 and 5-103 summarized on a WD AGO Form 5-114 are filed together in account-code sequence with addingmachine tapes attached to requisitions applicable to each account (fig. 8).

b. An alternate method of summarizing materials and equipment costs by the use of WD AGO Form 5-101 is authorized. If this method is used, requisitions are sorted daily by account codes, an adding-machine tape is run on requisitions applicable to each account, and the total thereof entered on WD AGO Form 5-101 in the column bearing the corresponding code number. At the close of the current month or oftener if desired, the columns are added down and across to establish a total and insure accuracy in tabulation. WD AGO Forms 5-102 and 5-103 summarized in this manner are filed daily in account-code sequence with addingmachine tapes attached. The adding-machine tapes bear the date on which posting was made to

the summary.

c. The property section summarizes the value of each type of property listed on each property voucher. Thus, the value of property applicable to each inventory account is indicated on all property vouchers. This summary need not be made on WD AGO Forms 5–102 and 5–103 listing expendable and class P property only.

23. Recording

If the alternate method of summarizing material and equipment costs is used, a cost-distribution voucher, WD AGO Form 5-114 (par. 34), is prepared covering each summary of distribution of material and equipment, WD AGO Form 5-101. Debit charges for material and equipment are noted on WD AGO Form 5-114 in total only, and postings to the detailed accounts are made from WD AGO Form 5-101. The summary of

distribution of material and equipment is attached to and filed with the applicable cost-distribution voucher.

24. Property Documents

In addition to the check list of requisitions on storekeeper (par. 19a), the cost section maintains a check list of all property vouchers. As property documents are received in the cost section, the property voucher number is checked off. To account for documents covering the installation of class P property, requisition numbers and property voucher numbers assigned to WD AGO Forms 5-102 and 5-103 are checked off appropriate lists. At the end of each month, the cost section ascertains the last requisition number and property voucher number assigned to property documents for the month. All numbers assigned property documents are accounted for, and appropriate entries are made in cost records, except for such items not to be costed as class P property removed from installation and turned in to the salvage officer. An alternate method, assuring receipt of property documents and requisitions on storekeeper by transmittal control sheets, may be used in place of check lists.

Section II. SALVAGED AND CLASS P PROPERTY

25. Class P Property

Cost of maintenance and repair of class P property is chargeable to the account applicable to the property prior to its removal from installation. To illustrate cost-accounting entries applicable to installation and removal of class P property, typical transactions are cited. These illustrations cover property value only.

a. Property issued from stock for initial installation. Installation is considered initial unless an

item is installed as a replacement:

(1) Debit: Applicable new-work account.

(2) Credit: Account 682-10.

- b. Serviceable property removed from buildings or other facilities and returned to stock without replacement:
 - (1) Debit: Account 682–10.
 - (2) Credits: Account 699-30.

Note. The value of serviceable mess equipment when removed from buildings and returned to Quartermaster without replacement is not recorded in the cost records.

- c. Removal from installation for repair with prompt replacement by another like unit:
 - (1) Removed unit:
 - (a) Debit: Account 682-10.
- (b) Credit: Applicable maintenance and repair account.

Note. The posting indicated here is concurrent with applicable posting to the stock-record account.



(2) Installed unit:

(a) Debit: Applicable maintenance and repair account.

(b) Credit: Account 682-10.

- d. Removal from installation for disposal to salvage officer and with replacement by another unit:
- (1) Removed unit is not reflected in cost system.

(2) Installed unit:

(a) Debit: Applicable maintenance and repair account.

(b) Credit: Account 682-10.

e. In transfers from one facility for installation or replacement in another facility on the post, equipment value is not reflected in cost accounts.

f. Removal from installation for subsequent determination as to repairability, and replacement by another like unit:

(1) Removed unit:

(a) Debit: Account 682-10.

(b) Credit: Applicable maintenance and repair account.

Note. The posting indicated here is concurrent with applicable posting to stock-record cards. If the property is subsequently determined to be nonrepairable, the entry shown is reversed.

(2) Installed unit:

(a) Debit: Applicable maintenance and repair account.

(b) Credit: Account 682-10.

g. Labor costs incurred in removing class P property from installation are charged as follows:

(1) The applicable new-work account as deletion if property is returned to stock and is not to be replaced.

(2) The new-work account applicable to the reinstallation if property is transferred to another building or facility on the post and reinstalled as an initial installation.

(3) To applicable maintenance and repair account if property is transferred to another

building or facility on the post as a replacement for a similar item.

(4) Applicable maintenance and repair account if item is removed for repair with prompt replace-

ment by another like item.

h. The value of mess equipment obtained from the Quartermaster is recorded in the cost records as illustrated in paragraphs 25a, c, d, e, and f except that where account 682-10 is mentioned, account 699-30 is substituted.

26. Cannibalization of Class P Property

The cost of reclaiming and reconditioning usable parts from nonrepairable items of class P property is debited to an appropriate subaccount under account 634-16. As reclaimed items are placed in stock, the applicable inventory account is debited at the value of like items carried in stock or at a fair market value if not previously stocked. The appropriate subaccount under account 634-16 is credited with cost of reclaiming and reconditioning as reflected in the subaccount. The difference between value of reclaimed parts and cost of reclamation is credited to account 699-20. If cost of reclamation exceeds value of items reclaimed. account 699-20 is debited with the amount of such excess. In such cases, the advisability of reclaiming parts should be investigated, the critical nature of the items being considered.

27. Salvage of Real Property

a. Demolition Costs. The cost of demolition of buildings and structures, surfaced areas, and the like, and the dismantling of utilities systems is chargeable to the applicable new-work account if the facility removed is not to be replaced. If the facility is to be replaced, the cost of demolition or dismantling is chargeable to the account applicable to the replacement.

b. Reclamation Costs. The cost of reclaiming and reconditioning usable parts and materials is

recorded as shown in paragraph 26.

CHAPTER 5 **CONTRACTS**

28. General

Cost of work performed and services received under contract is recorded as prescribed in this manual. Contracts covering repairs and utilities work and services at posts are normally limited to the following:

- a. Lump-sum and unit-price contracts administered by the post for maintenance and construction.
 - b. Utilities service contracts.
- c. Inspection and maintenance contracts administered by service command headquarters.

29. Work Contracts

Cost incurred for work done by contract is recorded in the cost records on the basis of approval partialand final-payment estimates. If approved-payment estimates are not available at the end of each month, costs recorded are estimates based on percentage of work actually accomplished. Such estimates are reconciled with payment estimates when the latter are approved.

30. Utilities Services

a. Cost of electricity, gas, water, sewage disposal, etc., purchased under contract is obtained from delivery orders or utilities companies' bills. If utility services have been received in one month but invoices are not received until a subsequent month, accrued costs and base data for utilities used to the end of the current month are determined from such available information as meter readings and applicable rates cited in the contracts. These costs are charged to appropriate accounts in the current month's business and base data is included in the current month's cost

b. Since collections representing recoupments of connection charges made a part of utility contracts are in the nature of repayments of advances by the government, they are credited to an openallotment account. They are not recorded as collections because they do not directly affect repairs and utilities funds. Appropriate purchased-utility accounts are charged with the net amount of utility bills before deducting credit for repayment of connection charges.

c. Cost of purchased utilities services as recorded in utilities accounts is not reduced because

of resale of such services.

31. Contracts Administered by Service Command Headquarters

Certain contracts for repairs and utilities are administered by service command headquarters. Payments for the services received are made from funds retained by service command headquarters. These contracts cover such services as inspections and maintenance of automatic fire-alarm systems, watch systems, and manual-alarm systems, inspection of boilers, etc. Service command headquarters notifies posts monthly of costs incurred for inspection and maintenance done under the terms of these contracts. These costs are taken up by the posts as maintenance and repair charges in applicable cost accounts with contra entry to account 699-50. Service command notifications of costs incurred is based on unit costs stated in appropriate contracts on evidence that the services have been performed. This evidence may be the contractors' inspection reports confirmed by the post engineer.

32. Recording

Cost-distribution vouchers, WD AGO Form 5-112 or 5-114, depending on whether post funds are chargeable, are prepared from evidence of accomplished work and services received (estimates are used when approved-payment estimates are not available), delivery orders, invoices, or formal notification for contracts administered by service command headquarters. When cost of contractual work and services are estimated to establish and record costs in the period incurred, original charges are adjusted on receipt of applicable approved-payment estimates, delivery orders, invoices, or formal notifications.

CHAPTER 6

COST RECORDING

33. General

Successful cost-accounting systems require accurate and prompt recording of data from various sources. An uninterrupted flow of required information must be maintained to the cost section, where prompt review, consolidation, and recording are essential. To record properly all costs incurred, the person responsible for cost accounting must see that daily labor reports, requisitions on storekeeper, receiving reports, shipping documents, inventory-adjustment reports, payment estimates, delivery orders, etc. are promptly received and processed by the cost section.

34. Cost-distribution Vouchers

All postings to the cost ledger are supported by cost-distribution vouchers, WD AGO Forms 5-112 and 5-114 (figs. 9 and 10), which serve as the posting media. WD AGO Form 5-113 (fig. 11) is a continuation sheet for WD AGO Forms 5-112 and 5-114.

a. WD AGO Form 5-112. WD AGO Form 5-112 is used to record all transactions which establish an indebtedness of post repairs and utilities funds. Such transactions include distribution of labor for post engineer civilian employees and receipt of property or services purchased with

post repairs and utilities funds.

b. WD AGO FORM 5-114. WD AGO Form 5-114 is used to record liquidation of indebtedness of post repairs and utilities funds and all transactions not requiring expenditure of such funds. Examples of such transactions are distribution of labor of enlisted personnel, general prisoners, and prisoners of war doing repairs and utilities work; receipt of property and services without charge to post repairs and utilities funds; increases or decreases in allotment of funds.

35. Preparation and Distribution

Cost-distribution vouchers must be prepared by personnel thoroughly familiar with prescribed cost accounts. These forms are assigned voucher numbers in numerical order in a single series. A new sequence of numbers is started at the beginning of each fiscal year or each month if the voucher number is prefixed with the numeral indicating the month.

a. WD AGO Form 5-112. WD AGO Form 5-112 is prepared in duplicate showing applicable accounts to be debited and the accounts-payable

account to be credited.

(1) The original is retained in the post engineer

office for posting to the cost ledger.

(2) The duplicate is forwarded to the post fiscal office where it is held until the disbursement voucher is posted as an expenditure in the fiscal records. The post fiscal office then records pertinent information in the space DISBURSEMENT BY FINANCE OFFICE and returns the duplicate copy to the post engineer office for recording.

b. WD AGO FORM 5-114. WD AGO Form 5-114 is prepared in only one copy showing debits and credits applicable to accounts affected and a full explanation of entries, including references to the documents from which the in-

formation was obtained.

36. Posting and Filing

Original WD AGO Forms 5-112 and 5-114 are posted individually to the applicable WD AGO Form 5-110 or 5-111. The dates entered on WD AGO Forms 5-110 and 5-111 are dates of cost-distribution vouchers, not the dates postings

are made to the ledger (table IV).

a. As an alternate method a cost-voucher register may be used. Cost-voucher registers are maintained to account for all cost vouchers. They show debit and credit entries to reconciliation accounts, including accounts in the 680 series, and other such desirable information as disbursement-voucher numbers and the like. Cost-voucher registers are balanced at the close of business for the current month, and reconciliation accounts on WD AGO Form 5-111 are posted in total, using the cost-voucher-register page number as the reference source of entry.

b. After WD AGO Form 5-112 is posted to the ledger, it is filed in an open accounts-payable voucher file until the duplicate is returned from the fiscal office showing the required information as to payment. WD AGO Forms 5-112 are then removed, compared with the duplicate, and appropriate information listed on WD AGO Form 5-114. (An alternate method of liquidating accounts payable by posting direct from WD AGO Form 5-112 may be employed where practicable.) The amount originally costed is debited to the applicable accounts-payable account and the amount actually paid from repairs and utilities funds is credited to account 684-00. Any difference between the amount originally costed and the amount paid as a result of discounts taken by the finance officer is credited to account 695-00. Differences caused

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Figure 9.

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Figure 10.

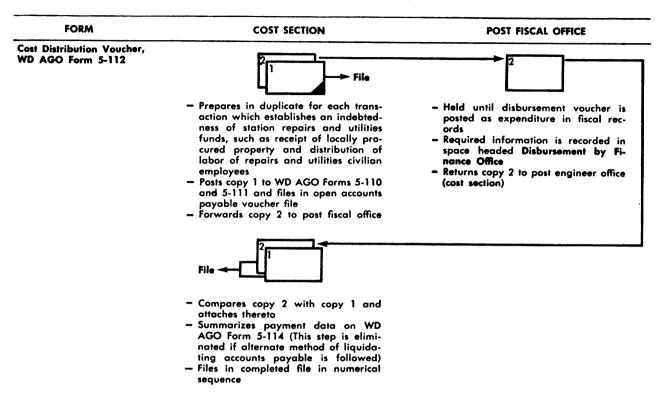
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Figure 11.

Table IV. Flow chart for WD AGO Form 5-112.

FLOW CHART

COST DISTRIBUTION VOUCHER



by errors are adjusted by correcting original entries (fig. 12).

c. WD AGO Forms 5-112 and 5-114 are filed in a completed file in numerical sequence after all required postings to the cost ledger are completed.

37. Cost Ledger

A cost-ledger sheet is maintained for each account prescribed in paragraph 61 (and each special account prescribed in par. 38) that applies to each station assigned a cost-reporting station number. Accounts 610–11 through 670–00 and subaccounts under 683–10 are maintained on WD AGO Form 5–110 (fig. 13). Accounts 680–10 through 699–60, except subaccounts under 683–10, are maintained on WD AGO Form 5–111 (fig. 14). Ledger sheets are arranged in account-number sequence. If the post engineer maintains accounts for more than one reporting station, the accounts for each station are kept in individual ledgers.

38. Accounting for Individual Projects

An individual cost-ledger sheet is maintained for each approved maintenance and repair project estimated to cost in excess of \$1,000 and for each approved new-work project estimated to cost in excess of \$200. Although separate costs are not

to be kept for each work order, individual costs are kept on maintenance and repair projects estimated to cost \$1,000 or less and new-work projects estimated to cost \$200 or less when necessary to exercise reasonable control. Individual cost-ledger sheets are maintained as follows:

- a. Establishing Ledger Sheets. If a project involves two or more cost accounts, a separate ledger sheet is established for each account. Such ledger sheets are cross-referenced so the cost of the entire project can be readily determined.
- b. Interim Reports. For interim reports, accounts established for individual projects are added to balances of applicable regular accounts. Transfers of balances to regular accounts are made only when projects are completed and at the end of each fiscal year. They are retained as memorandum balances in the closed out accounts so total cost of individual projects may be determined regardless of the fiscal year in which the costs were incurred.
- c. Closing the Accounts. After all costs incurred have been posted to the ledger following completion of project, the account is closed out by transferring the total cost, identified as to labor, materials, and the like to the regular account.

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Figure 13. Ledger sheet, feature accounts.

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Figure 14. Ledger sheet, reconciliation accounts.

39. Balancing Ledger Accounts

After all costs incurred during the month have been posted, accounts 610–11 through 670–00 are totaled so that each shows the monthly cost accumulation and total cost for the fiscal year to date (fig. 13); month-end balances of accounts 680–10 through 699–60 are indicated by skipping one line and re-stating the month-end balance (fig. 14). The monthly increments of accounts 610–11 through 670–00 are totaled to establish the monthly cost accumulation of accounts 680–10 or 680–20 as applicable. After this accumulation and total to date for each account have been determined, a trial balance is taken. The total debits (balance to date accounts 680–10 to 886–00 inclusive) must equal the total credits (balance to date accounts 695–00 to 699–60 inclusive).

40. Year-end Closing Ledger

a. Since cost accounts are designed to reflect cost applicable to activities of the current fiscal year, balances of accounts 610-11 through 670-00 (680-10 or 680-20), 680-30 and 680-40 are closed into account 681-10 at the end of each fiscal year as prescribed in paragraph 230. Balances of certain reconciliation accounts set forth in paragraph 231 are transferred to account 681-20 at the close of each fiscal year.

b. Adjustments made in the current fiscal year which apply to transactions of the prior fiscal year are reflected in prior fiscal-year accounts, (accounts 681-10, 681-20, or 697-20 as applicable). The goal in this connection is to reflect the cost of transactions in the fiscal year in which they

occurred.

CHAPTER 7 RECONCILEMENT

41. General

To insure correctness and completeness of information recorded in cost-accounting records and reported on cost reports, certain cost-account balances and base data are reconciled with fiscal, property, and operating data. Cost-accounting, fiscal-accounting, and property-accounting records are maintained separately because of the nature and primary use of information contained in each. Since a direct relationship exists between certain information contained in the three records, monthly reconciliation of applicable items is required.

42. Information required

The post engineer office requires copies of documents or complete written information of all documents or transactions affecting repairs and utilities. The following information is furnished the post engineer office.

a. Allotments Received. Written statements showing amounts of allotments and suballotments

received and withdrawn.

b. Expenditures. Information about expenditure of funds quoted on post engineer expenditure documents is furnished on duplicate copies of WD AGO Form 5-112 in accordance with paragraph 35a (2). The post fiscal office also furnishes a copy of the expenditure document or complete written information for any expenditure of repairs and utilities funds for which a copy of WD AGO Form 5-112 is not filed in the fiscal office.

c. Collections. A copy of the report of collections arising from repairs and utilities activities deposited with the finance officer or complete written notification thereof and written notification of uncollected accounts turned over to the finance officer for collection are furnished by the

sales officer or other responsible office.

d. ADJUSTMENTS. A copy of the applicable form, WD AGO Form 14-37, Standard Form 1080, WD AGO Form 14-104, or complete written information on any adjustment, transfer, or reimbursement affecting repairs and utilities funds, is furnished by the fiscal office.

e. Report on Status of Allotments. A copy of the monthly report on status of allotments of repairs and utilities funds is furnished by the post fiscal office.

43. Procedures

To insure correct and complete cost records and reports, the following reconciliations are made after the trial balance has been taken and the balances proved at intervals indicated below:

a. Quarterly. Inventory-account balances are checked with total on-hand values on stock-record cards, WD AGO Form 5-104 at least quarterly. Quarterly reconciliations are made as of 30 September, 31 December, 31 March, and 30 June. Required adjustments are made as explained in paragraph 20. If all property documents are accounted for as prescribed in chapter 4, the amounts requiring adjustment will be small. If a large adjustment is required to reconcile the records, however, a review of property- and costaccounting methods is necessary. Adding-machine tapes and working papers properly identified as to date of reconcilement are filed by the cost section.

b. Monthly. (1) Material-production accounts are checked to insure that production cost of completed items have been transferred to

applicable inventory accounts.

(2) Balances of accounts payable, accounts 698-10 and 698-20, are checked with the total of applicable cost-distribution vouchers, WD AGO Forms 5-112, in the open-voucher file.

(3) Balance of account 697-10 is reconciled with applicable allotments received shown on Report on Status of Allotments by the fiscal

officer (fig. 15).

(4) Balance of unexpended allotments, account 684-00, is reconciled with the amount of difference between allotments received and expenditures to date shown on Report on Status of Allotments. Expenditure documents recorded in only one of the records, cost or fiscal, are considered in the reconciliation (fig. 15).

(5) If reconciliation of cost and fiscal records is unsuccessful, a detailed check is made of postings

to both records. All errors are corrected.

TM 5-602 PTO 15
RECONCILIATION STATEMENT
FISCAL RECORDS: Report on Status of Allotments BSA Project No
Allotments Expenditures Unexpended Allotments
Current F. Y. •• Prior F. Y.
TOTALS
COST RECORDS:
ACCOUNT NO. 684-00, UNEXPENDED ALLOTMENTS NOTE - * The balances indicated in these two spaces should be in agreement provided all postings are correct and all transactions affecting allotments and expenditures of repairs and utilities funds have been re- flected in both records at time of recon- cilement. If these balances are not in agree- ment the following computations (with all documents itemised and identified) are re- quired:
PLUS ADMITIONS a. If Recorded in Fiscal but not in Cost (1) Allotments (2) Expenditure Refunds (Uncompleted allotments only)
b. If Recorded in Cost but not in Fiscal (1) Expenditures (2) Decreases in allotments TOTAL ADMITIONS
LESS DEDUCTIONS a. If Recorded in Fiscal but not in Cost (1) Expenditures (2) Decreases in allotments b. If recorded in Cost but not in Fiscal (1) Allotments (2) Expenditures Refunds (Uncompleted allotments only) TOTAL DEDUCTIONS
RECONCILED BALANCE, ACCOUNT NO. 681-00
AGCOUNT NO. 697-10, ALLOTMENTS RECEIVED, CURRENT F. Y. BOTE - ** The balances indicated in these two spaces should be in agreement provided all post- ings are correct and all transactions affecting allotments and decreases in allotments of repairs and utilities funds have been reflected in both records at time of reconcilement. If these balances are not in agreement, the following computations (with all documents itemized and identified) are required:
PLUS ADMITICES (1) Allements recorded in Fiscal but not in Cost (2) Withdrawals recorded in Cost but not in Fiscal TOTAL ADMITICES
(1) Allotments recorded in Cost but not in Fiscal (2) Withdrawals recorded in Fiscal but not in Cost TOTAL DEDUCTIONS
RECONCILED BALANCE, ACCOUNT NO. 697-10

Figure 15. Reconciliation statement.

CHAPTER 8

COST REPORTING

44. General

A monthly repairs and utilities cost report is required from each installation classified as a main post or subpost for cost-accounting purposes. To identify these installations on machine tabulations prepared by OCE, each such main post and subpost is assigned a station cost-reporting number. Numbers assigned before publication of this manual continue in effect until changed by OCE. When an installation is activated as a main post or subpost, or when an installation previously classified as a minor offpost facility is reclassified as a main post or subpost, the responsible command must request OCE to assign a station costreporting number. Such requests include the official name and address of the post, repairs and utilities jurisdiction, the command jurisdiction, type, and size.

45. Preparation

The repairs and utilities cost report, WD AGO Forms 5-95 and 5-96 (Reports Control Symbol EUG 84) (figs. 16 and 17), is prepared in enough copies to permit distribution given in paragraph 46. They are prepared from cost ledgers after all accounts have been totaled, balanced, and reconciled as prescribed in chapter 7. Cost reports are forwarded on or before the seventh of the month following the report period. Forwarding of the report is not to be delayed even though reconcilement with fiscal records cannot be made before that time. Reconcilement is then completed immediately after the report is submitted.

a. WD AGO FORM 5-95. WD AGO Form 5-95 is completed according to the following

instructions:

(1) STATION is the official name of the in-

stallation.

(2) COST REPORTING STATION NUMBER is the identification number assigned by OCE for repairs and utilities cost-reporting purposes, not to be confused with the station number listed in TM 14-700.

(3) PERIOD ENDING is the last day of the

month for which the report is prepared.

(4) TYPE is the general use of the installation such as general hospital, port of embarkation, and the like. Code prescribed in paragraph 47c is entered.

(5) SIZE is the total designed housing capacity, including all types of personnel. Code prescribed

in paragraph 47d is entered.

(6) REPAIRS AND UTILITIES JURISDICTION is the command having repairs and utilities responsibility for the installation. This is determined in accordance with the command which furnishes ESA Project 300 funds to the installation. Enter code prescribed in paragraph 47a.

(7) COMMAND JURISDICTION is the command having responsibility for tactical operation of the installation. Code prescribed in paragraph

47b is entered.

(8) ACCOUNT TITLE, ACCOUNT NUMBER, and BASE DATA—UNIT are reported in account number sequence. Base data for each account (prescribed in ch. 11) applicable to main posts or subposts are reported regardless of

whether costs have been incurred.

(9) BASE DATA—QUANTITY INC OR DEC THIS MO shows increases or decreases in base data for the current month, decreases being prefixed by the minus sign. Purchased-utilities accounts and such production accounts as waterpumping stations, water-filtration plants, and the like must accurately reflect monthly increments. If base data for such accounts as buildings, roads, and the like remain unchanged from the previous month, no entry is made in this column for such accounts. An entry must be made in this column, however, when the base data for an account reported in the column BASE DATA—QUAN-TITY TO DATE is for any reason greater or less than the amount reported in that column for the previous month.

(10) BASE DATA—QUANTITY TO DATE contains base data for each account for which base data has been prescribed. For such accounts as purchased utilities, production accounts, overhead accounts, and the like the base data is cumulative for the fiscal year. Base data for such accounts as building, roads, grounds, railroads, and the like is the total base data as of the end of the month for which the report is prepared. Any difference between amount reported on the current report and amount reported for the previous month is entered under BASE DATA—QUAN-

TITY INC OR DEC THIS MO.

(11) COST—THIS MONTH is the net amount of cost incurred in the current month on activities covered by each account.

(12) COST—TO DATE is the net amount of cost incurred in the current fiscal year to date on

activities covered by each account.

(13) APPROVED ESTIMATE is the estimated amount of cost to be incurred on activities covered



REPAIRS AND UTILITIES MONTHLY COST REPORT - FEATURE ACCOUNTS TYPE			REPORTS CONTROL SYMBOL BUG 84				
			STATION				
					COST REPORTING	STATION NUMBER	
3176	L'COmmand	e.en.can			PERIOD ENDING		
R & U JURISDICTION	CONMAND JURISDICTION BASE DATA			SHEET OF			
	·					131	┥
ACCOUNT TITLE	ACCOUNT HUMBER	UNIT	QUANTITY INC. or DEC. THIS MORTH	QUANTITY TO DATE	THIS MONTH	TO DATE	APPROVED ESTIMAT (Ballars Only)
		-					
							†
							

Figure 16. Monthly cost report, feature accounts.

ECONCII	ACCOUNTS ACCOUNTS RESTALS AND OTHER I ALLOTHERY'S RECEIVED This Flacel Ver Prior Fiscal Ver ACCOUNTS PAYABLE Materials, Suppl Payrells	CREDIT ACCOUNT TITLE REVENUE D To Date	01	TOTAL
RECONCII	ACCOUNTER TO THE PROPERTY OF T	PERIOD (NOING SHEET CREDIT ACCOUNTY TITLE REVERUE D To Date	695-00 697-10 699-10	10TAL
RECONCII	ACCOUNTER TO THE PROPERTY OF T	CREDIT ACCOUNT THE CREDIT ACCOUNT ACCOU	ACCT. NO. 695-00 697-10 697-20 699-10	TOTAL
	ACCOUNTER TO THE PROPERTY OF T	CREDIT ACCOUNT TITLE REVENUE D To Date	ACCT. NO. 695-00 697-10 697-20 699-10	10140
	ACCOUNTER TO THE PROPERTY OF T	NT TITLE REVENUE D To Date	ACCT. NO. 695-00 697-10 697-20	TOTAL
TOTAL	RESTALS AND OTHER ALLOTHENTS RECEIVE This Flacel Year Prior Flacel Year ACCOMMITS PAYABLE Materials, Suppl Payrolls	NT TITLE REVENUE D To Date	ACCT. NO. 695-00 697-10 697-20	10141
TOTAL	RESTALS AND OTHER ALLOTHENTS RECEIVE This Flacel Year Prior Flacel Year ACCOMMITS PAYABLE Materials, Suppl Payrolls	REVENUE D To Data irs	695-00 697-10 697-30	101AL
	ALLORIGHTS RECEIVE This Fiscal Year Prior Fiscal Yea ACCOMMIS PAYABLE Heterials, Suppl Payrells	D Te Dete	697-10 697-20	
	This Flacel Year Prior Flacel Yea ACCOUNTS PAYABLE Materials, Suppl Payrolls	Te Dete	697-20	
	This Flacel Year Prior Flacel Yea ACCOUNTS PAYABLE Materials, Suppl Payrolls	Te Dete	697-20	
	Prior Fiscal Yes ACCOUNTS PAYABLE Motorials, Suppl Payrolls	ra .	697-20	
	Prior Fiscal Yes ACCOUNTS PAYABLE Motorials, Suppl Payrolls	ra .	697-20	
	Materials, Suppl Payrells	les & Honper, Services		
	Payrolls	les & Homper, Services		
			1 400 -0	
	COSTS BOT CHARGEAR		930-20	
	COOLO BOL CHAMBEND	LE TO POST R & W PURDS	1	
	Labor (Base Data		699-10	
	Heterials and Su	pplies	699-20	
	Machinery and Eq	u i poent	699-30	
	Fue1		699-10	
	Other		699-50	
	Facilities Recei-	ved by Transfer	699-60	
			1 1	
	ŀ		1 1	
	1		1 1	
			1	
	1			
	TOTAL - CREDITS			
		Other Fecilities Recei	Other Facilities Received by Transfer TOTAL - CPEDITS acceptably reflects repairs and stillties costs of this stati	Other Facilities Received by Transfer 699-60 TOTAL - CREDITS Acceptably reflects repairs and stilling costs of this station.

Figure 17. Monthly cost report, reconciliation accounts. ① Front side.

STATEMENT OF RECONCILIATION OF ACCOUNTS			
ACCOUNT		ATION MADE OF CURRENT NG MONTH	IF RECONCILIATION WAS NOT MADE AT CLOSE OF CURRENT REPORTING MONTH, ENTER DATE LAST SUCCESS-
	YES	МО	FUL RECONCILIATION WAS MADE
- BALANCE OF INVENTORY ACCOUNTS RECONCILED WITH TOTAL FOR NAMED VALUES SHOWN ON APPLICABLE STOCK RECORD CARDS A. Account No. 692-10			
B. Account We, 682-29			
C. Account No. 682-30			
D. Account No. 682-NO . ACCOUNT NO. 682-00 RECORCILED WITH FISCAL RECORDS			
. ACCOUNT NO. 697-30 RECONCILED WITH FISCAL RECORDS			
. TOTAL COST VOUCHERS IN "UMPAID VOUCHER FILE" RECONCILED WITH TOTAL ACCOUNTS NOS. 696-50 AND 698-30.			

Figure 17. Monthly cost report reconciliation accounts. 3 Reverse side.

by each account as approved by the responsible command. Regardless of the amount of cost actually incurred, the approved estimate is not changed until a revised estimate is approved by the responsible command. Reports for period ending 31 July of each fiscal year and for each subsequent month to and including December reflect approved estimates for period 1 July to 31 December. Reports for period ending 31 January of each fiscal year and for each subsequent month to and including June reflect revised estimates for the entire fiscal year. Such revised estimates for the last half of the fiscal year reflect actual cost incurred from 1 July to 31 December plus approved estimated cost for period 1 January to 30 June.

estimated cost for period 1 January to 30 June.

(14) The columns COST THIS MONTH,
COST TO DATE, and APPROVED ESTIMATE
are footed and totaled. The totals for subposts
are reported as TOTAL COST THIS FISCAL
YEAR TO DATE—SUBPOSTS, account 680–20.
Individual WD AGO Forms 5–96 are not submitted for subposts.

b. WD AGO FORM 5-96. WD AGO Form 5-96 is completed according to the following instructions:

(1) Station name, reporting number, and the like are inserted in accordance with paragraph 45a

(1) through (7).

(2) The balance for each debit- and credit-balance account is reported. If an account is not applicable to a station or if the balance at the close of the month is zero, a zero is inserted in the TOTAL column opposite the account.

(3) The base data for account 699-10 is reported in the parentheses next to the title of the account.

(4) The post engineer and commanding officer of the installation sign each report in the space provided.

(5) The status of reconciliation of cost accounts is indicated on the reverse side. The form in which the information is reported is self-explanatory.

c. Checks. To insure accuracy, the following checks are made before reports are submitted.

- (1) Monthly costs on the current report plus cost to date for the preceding month equals cost to date on the current report. This check is made for each account applicable to the station.
- (2) Total cost to date for accounts 610-11 through 670-00 for the main post equals the amount reported for account 680-10.
- (3) Total cost to date for accounts 610-11 through 670-00 for each subpost equals the amounts reported for account 680-20 for each subpost.
- (4) If the main post is reporting costs for one or several subposts, the total of accounts 610-11 through 670-00 as recorded on subpost cost reports equals the amount reported for account 680-20 for the main post.
- (5) The net total of the debit reconciliation accounts equals the net total of the credit reconciliation accounts.
- (6) The final-typed report is checked by running adding machine tapes on all columns which are footed and totaled to insure submission of balanced reports. Adding machine tapes are not submitted with reports.

46. Submission

The post engineer will review monthly cost reports to insure accuracy of data reported. Cost reports are forwarded on or before the seventh of the month following the period for which the report is prepared. Copies are distributed as follows:

- a. The original signed copy direct to Office, Chief of Engineers, Repairs and Utilities Division, Attention: SPEUG, Washington 25, D. C.
- b. For class I, II, and IV installations (exception, par. 46c), two copies are sent to the appropriate service command, attention of service command
- c. For class I, II, and IV installations under the jurisdiction of class III installations for repairs and utilities, two copies are sent to the appropriate air force or command and one copy to the appropriate service command, attention of service command engineer.

d. For class III installations (exception, par. 46e), two copies are sent to the appropriate air force or command and one copy to the appropriate service command, attention of service command engineer.

e. For class III installations under the jurisdiction of class I, II, or IV installations for repairs and utilities, two copies are sent to the appropriate service command, attention of service command engineer.

f. One copy is retained by the post engineer.

47. Station Codes

The repairs and utilities jurisdiction, command jurisdiction, type, and size of each main post and subpost are shown on repairs and utilities cost reports by the code numbers indicated as follows:

- a. Repairs and Utilities Jurisdiction:
 - 10—AAF, Commanding General
 - 11—AAF, Continental Air Forces
 - 12—First Air Force
 - 13—Second Air Force
 - 14-Third Air Force 15—Fourth Air Force
 - 16-I Troop Carrier Command

 - 17—AAF Training Command
 18—Eastern Flying Training Command
 19—Central Flying Training Command

 - 20—Western Flying Training Command
 - 21—Eastern Technical Training Command
 - 22—Western Technical Training Command
 - 23—Air Technical Service Command (Other than Air Control Depots)
 - 24—Air Control Depots
 - 25—Air Transport Command

 - 26—AAF Center 27—AAF Personnel Distribution Com-
 - 40—Military District of Washington
 - 41—First Service Command
 - 42—Second Service Command
 - 43—Third Service Command
 - 44—Fourth Service Command
 - 45—Fifth Service Command
 - 46-Sixth Service Command
 - 47—Seventh Service Command

 - 48—Eighth Service Command
 - 49—Ninth Service Command

b. Command Jurisdiction:

- 10—AAF, Commanding General
- 11—AAF, Continental Air Forces
- 12—First Air Force
- 13—Second Air Force
- 14—Third Air Force
- 15—Fourth Air Force
- 16-I Troop Carrier Command
- 17—AAF Training Command
 18—Eastern Flying Training Command
 19—Central Flying Training Command
 20—Western Flying Training Command

- 21—Eastern Technical Training Command 22—Western Technical Training Command
- Service Command 23—Air Technical
- (Other than Air Control Depots)
- 24—Air Control Depots
- 25—Air Transport Command
- 26—AAF Center
- 27-AAF Personnel Distribution Command
- 41—Quartermaster Corps
- 42—Chemical Warfare Service
- 43—Signal Corps
- 44—Corps of Engineers
- 45—Ordnance Department
- 46—Medical Department (incl. General Hospitals)

47—Transportation Corps

48—Service Command (excl. General Hospitals)

60-Army Ground Forces and Defense Commands

80—Other

c. TYPE.

10—Tactical 11—Schools

12-Reception, replacement training, and reclassification centers

13—General hospitals

14—Internment facilities

15—Staging areas, overseas discharge and replacement depots, and ports of embarkation

16—Industrial facilities proving and grounds

17—Harbor defenses

18—Ammunition docks, storage facilities, and supply depots

19—Other major government-owned installations

30—All leased facilities

Note. Codes 10 through 19 are used for each governmentowned post assigned a repairs and utilities cost-reporting station number. All installations classified as Leased in accordance with paragraph 54, are coded 30, regardless of type of activity.

d. Size. (1) All stations except general hospitals and storage depots.

and storage acposs.	Total housing capacity
Class range	(including all types personnel)
1	Over $58,000$
$oldsymbol{2}$	38,001-58,000
3	24,001-38,000
4	12,001-24,000
5	6,001-12,000
6	3,001-6,000
7	1,501- 3,000
8	501- 1,500
9	1- 500

(2) All general hospitals:

` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
Class range	Bed capacity
6	Over 1,500
7	751-1,500
8	1- 750
(0) All stanson Jamestan	

(3) All surage depois.	
Class range	Square feet storage area
5	Over 4,000,000
6	2,000,001-4,000,000
7	500,001-2,000,000
8	1- 500,000

48. Command Cost Summaries

a. Comparative summaries are prepared by the Office of the Chief of Engineers for each service

command grouping all reporting stations, including class III, as follows:

- (1) AAF repairs and utilities jurisdiction at Government-owned stations under AAF command jurisdiction.
- (2) AAF repairs and utilities jurisdiction at Government-owned stations under ASF or AGF command jurisdiction.
- (3) AAF repairs and utilities jurisdiction at leased stations under all command jurisdictions.
- (4) Service command repairs and utilities responsibility at Government-owned stations under AAF command jurisdiction.
- (5) Service command repairs and utilities responsibility at Government-owned stations under ASF command jurisdiction.

(6) Service command repairs and utilities responsibility at Government-owned stations under

AGF command jurisdiction.

(7) Service command repairs and utilities responsibility at leased stations under all command

b. These summaries list base data, total cost fiscal year to date, and unit cost of each station under each cost account. In addition, the summaries indicate average costs by accounts for the stations in each of the above groups and also the average costs for each type of station within

the above groups:

c. Additional comparative summaries are prepared on which are listed the installations under the repairs and utilities jurisdiction of each air force or command. These summaries indicate unit costs and average unit costs for each account, for the stations listed, similarly as in paragraph 48b. These data are further summarized into a report listing total base data, total cost, and average unit cost by accounts for each air force and command without reference to individual stations.

49. Utilization of Cost Reports

Cost reports are to be used to the fullest extent in exercising administrative control of repairs and utilities activities at posts. At both post and command level, cost reports are used as a guide for determining the following:

a. Activities being either overemphasized or

neglected.

b. Activities being accomplished inefficiently. c. Wasteful use of such utility services as

water, electrical energy, gas, coal, and the like. d. Relationship of overhead cost to direct cost.

e. Relationship of cost incurred to approved estimates.

f. The effect of other activities at the post on repairs and utilities work.

CHAPTER 9

CLASSIFICATION OF INSTALLATIONS

50. General

The responsible command classifies each installation under its jurisdiction. For cost-accounting and reporting purposes, posts are classified as main posts, subposts, or minor offpost facilities.

51. Main Posts

a. General. Installations are classified as main posts when their size and nature, estimated annual cost of repairs and utilities, and all other considerations indicate that detailed cost data are necessary for adequate administrative control. Normally, individual installations are classified as main posts or subposts when the total estimated annual cost of repairs and utilities is in excess of \$50,000. Main posts are installations for which applicable accounts 610–11 through 699–60 are maintained.

b. RECONCILIATION ACCOUNTS. Main posts differ from subposts in that reconciliation accounts are maintained in the accounts of the former and not in the latter. Reconciliation accounts of main posts include sums applicable to subposts which they serve. Classification of installations as to main post or subpost is determined by command policy for making funds available to posts. (If one of several installations, all of which otherwise qualify as main posts, is allotted one sum for operation of the several posts, that installation is the main post, the others being subposts.) (See par. 53.)

52. Subposts

a. General. Installations are classified as subposts when served by or through a post engineer located at a main post and when the size and nature of the installation, the estimated annual cost of repairs and utilities, and all other considerations indicate that detailed cost data are necessary for adequate administrative control. Subposts maintain applicable accounts 610-11 through 680-20 and have their reconciliation accounts consolidated with those of the main posts serving them.

b. Auxiliary Landing Fields. Auxiliary landing fields are always classified as subposts. Cost of repairs and utilities and base data of auxiliary landing fields are reported under separate costreporting numbers assigned to government-owned auxiliary fields and to leased auxiliary fields. Example: If a base has six government-owned auxiliary fields, all cost and base data for the auxiliary fields are consolidated and reported as a subpost under a single cost-reporting number assigned to

the group. All cost and base data for leased auxiliary fields attached to a main base are consolidated and reported as a subpost under a reporting number assigned to the leased fields.

53. Offpost Facilities

Offpost facilities are minor installations, both Government-owned and leased, located off the limits of the main post but served by or through the post engineer of the main post. Installations are classified as offpost facilities when their size and nature, estimated annual cost of repairs and utilities, and all other considerations indicate that detailed cost data are not essential for adequate administrative control. Individual installations are usually classified as offpost facilities when their total annual cost of repairs and utilities is estimated at \$50,000 or less (exception, par. 53b).

a. INCLUDED. Included in offpost facilities are such government-owned and leased installations as bombing and target ranges, induction centers, recruiting stations, finance offices, military police detachments, bulk storage tanks, loading docks, and like facilities located off the limits of main posts and subposts.

b. Excluded from offpost facilities are the following:

(1) Fortification installations.

(2) Government-maintained access roads to a

main post or subpost.

(3) Such facilities as dams, impounding reservoirs, wells, springs, outfall sewers, water and sewage pumping plants, access gas and electric lines and appurtenant regulating equipment, and the like which are a part of the utilities systems of a main post or subpost although located off the limits of the post.

(4) Auxiliary landing fields (par. 52b).

54. Government-owned and Leased Installations

For cost-accounting purposes, installations are classified as Government-owned under the following conditions:

a. Installations on which the Government owns the majority of square feet of buildings.

b. Installations composed entirely of leased

lands without any buildings.

c. Installations composed of leased lands and such miscellaneous leased buildings as farm buildings and the like that are only incidental to the use of the installation.

Note.—These instructions are not to be construed as affecting in any way current requirements for the issuance of certificates of necessity under Public Law No. 530.

CHAPTER 10

CLASSIFICATION OF WORK

55. General

To insure uniformity in recording costs, jobs must be correctly classified so applicable account codes may be assigned to work orders. Although definitions and examples of the work classifications in this chapter are limited, they are indicative of all facilities. Repairs and utilities work is classified as follows:

a. Maintenance and repair.

b. Operation of utility plants and systems.

c. New work. (1) Additions, alterations, deletions, and new construction.

(2) Restorations necessitated by disaster.

56. Buildings and Structures

a. Maintenance and Repair. Maintenance and repair of buildings and structures include all work necessary to place or continue existing facilities in good and usable condition, not to exceed the design standard shown on the realproperty record. Exceptions to the limitation not to exceed the design standard are made when component parts of buildings and structures (including installed equipment for which accounts have not been provided) must be supplemented or replaced by higher-design materials or equipment than the existing standard to maintain the facility efficiently for its intended use. Examples of maintenance and repair follow.

(1) Installing a 1/2-inch, tapped pipe tee and gate valve on sprinkler-system drain lines to permit connecting a pressure-recording meter to determine cause of false alarms from the sprinkler system. (This work is necessary to maintenance and repair because false alarms from the system mean that it is not in good and usable condition. Therefore, all work, including testing, needed to restore workable order is a proper maintenance

and repair charge.)

(2) Painting upper wall and ceiling with oil paint, painting pipes, touching up dado, and painting baseboard of entire surgical building. (All painting, varnishing, and the like not done as part of a project of new construction, additions, and structural alterations are classified as maintenance and repair. This work preserves the facility and permits a clean and sanitary condition.)

(3) Installation of 2- by 6-inch tie beams and 2- by 6-inch knee bracing at alternate rafters to support sagging roof. (Although original plans and specifications did not call for these beams and bracing, the work is essential to efficient maintenance of the existing facility in its intended

(4) Removal of radiators and shoe mold, installation of plywood, application of felt-back floor covering, replacement of radiators and shoe mold in wards. (This is necessary to correct the unsafe and unsanitary condition caused by a worn wood Although the floor provided is of higher standard than the original, the entire cost is chargeable to maintenance and repair.)

(5) Installation of insulation shield between space heater and wall to protect wall from scorching. (This work is necessary to maintain the

building in good and usable condition.)

b. New Work. New work includes additions and alterations to and deletions from existing facilities, new construction, and restorations necessitated by disaster.

(1) Additions, alterations, deletions, and new construction of buildings and structures include

the following:

(a) Extension of an existing building or struc-

ture that increases its dimensions.

- (b) Such projects as extension of utilities within buildings; initial installation of permanently installed equipment; installation of additional equipment; changes in the unit arrangement by installing partitions, adding doors, windows, and the like; and all work necessary to convert a building or structure to a use other than the original design.
- (c) Removal of buildings and structures, or parts thereof, including removal of interior walls. partitions, installed equipment, and the like, except those removed as a part of a maintenance and repair project or restorations necessitated by disaster. Salvage materials and equipment removed from buildings are accounted for in accordance with paragraph 27.
- (d) Construction of buildings and structures separate and apart from existing buildings and structures.
 - (e) Typical examples are listed below.
 - 1. Extending barbed-wire stockade fence to include additional buildings in stockade area. (This adds to the length of the existing fence and is an addition.)
 - 2. Installing a window between existing windows in the laundry to provide additional ventilation. (Classified as alteration because it provides a facility not included in the plans and specifications and not contributing to efficient maintenance of the building.)



3. Installing a water faucet on exterior of building. (Does not contribute to efficient maintenance of building but merely provides an added facility.)

4. Initial installation or relocation of convenience electric outlets and lighting fixtures in buildings. (Initial installation is classified as an alteration. In the relocation, the unit arrangement of building facilities has been

changed.)

5. Installing an insulation shield on two sides of space heater in administrative building to shield occupants from direct heat. (Classified as an alteration because the work is required for a purpose other than building upkeep. This case is similar to that cited in paragraph 56a (5), done for a different purpose.)

 Installing an additional reach-in refrigerator in mess hall. (Classified as an alteration because this equipment is installed to meet added requirements, not to maintain existing equipment.)

(2) Restorations necessitated by disaster include all work necessary to replace wholly or in part buildings and structures damaged by fire, flood, storm, explosions, and the like. The repair of structures damaged by such operational accidents as collisions, derailment of railway cars, and the like is classified as maintenance and repair.

Roads, Parking and Open-Storage Areas, Walks, Airfield Pavements

a. MAINTENANCE AND REPAIR. Maintenance and repair of pavements and accessory facilities include all work necessary to place or continue existing facilities in good and usable condition to serve as originally designed. The following are included.

(1) All patching.

(2) All replacements to comparable standards and details except restorations necessitated by disaster.

(3) All surface and dust palliative treatments.

(4) All resurfacing of existing surfaces with 4 inches or less of flexible-type materials of comparable or lower type than the original surface. Example: Resurfacing a concrete pavement with 3 inches of bituminous concrete or resurfacing a gravel road with 4 inches of crushed gravel.

(5) Preservation and replacement of such incidental features as shoulders, ditches, culverts, retaining walls, underdrains, curbs and gutters,

and the like.

Note. Maintenance and repair work which results in a change of surface type is charged to the maintenance and repair account applicable to the surface type prior to conversion. Base data and the pro rata share of the costs applicable to the facility converted are also transferred. The cost to date for the current fiscal year applicable to

the converted facility being transferred is determined by multiplying the unit cost subsequent to conversion by the number of base data units converted. If a conversion, however, is accomplished as a result of damage caused by disaster or for any reason other than maintenance and repair, the work is chargeable to the applicable new work account.

- b. New Work. New work includes additions, alterations to and deletions from existing facilities, new construction, and restorations necessitated by disaster.
- (1) Additions, alterations, deletions, and new construction for roads, parking areas and openstorage areas, walks, and airfield pavements include the following:
- (a) Extension or widening of an existing pavement or improved surface to cause a net increase in base data, including grading, construction of and alterations to incidental features, and the minor adjustments to existing surfaces required to accomplish such extensions or widening.

(b) Major changes to existing paved or improved surfaces and incidental features beyond the scope of maintenance and repair.

- (c) Removal or obliteration of existing surfaced areas resulting in a net decrease in base data. This includes removal or obliteration of such features as handrails, guardrails, culverts, riprap, curb and gutter flumes, retaining walls, and the like incidental to the surfaced areas affected. Excluded from this category are removal of surfaced areas and incidental features if done as part of a project classified as maintenance and repair or restorations necessitated by disaster.
- (d) Initial construction of roads, parking and open-storage areas, walks, and airfield pavements.

(e) Typical examples are listed below.

1. Construction of additional surfaced areas, either adjoining or separate and apart

from other surfaced areas.

2. Resurfacing of gravel road by application of 2-inch mixed bituminous surface. (Classified as an alteration because 2 inches of mixed bituminous surface on an existing gravel road is considered as a major change to the paved surface and beyond the scope of maintenance and repair.)

- 3. Initial installation or extension of such incidental features as shoulders, ditches, underdrains, culverts, curbing, retaining walls, guardrails, handrails, and other related construction. (Classified as an addition, alteration, or new construction because it is a major change to features incidental to a paved surface.)
- (2) Restorations necessitated by disaster include reconstruction necessary to replace wholly or in part pavements and incidental features damaged or destroyed by storms of unusual intensity, floods, or other disasters.

58. Railroads

a. Maintenance and Repair. Maintenance and repair include all work necessary to place or continue existing railroad facilities in good and usable condition not to exceed the existing design standard. Exception to the limitation not to exceed the existing design standard is made when work exceeding that standard is essential to maintain the existing facility efficiently for serving the original requirements. Example: Replacement of 60-pound rail with 80-pound relayer rail on running tracks is maintenance and repair because 80-pound rails for running track is the minimum acceptable standard.

b. New Work. New work includes additions, alterations to and deletions from existing facilities, new construction, and restorations necessitated by

dısaster.

(1) Additions, alterations, deletions, and new

construction include the following:

(a) Extending existing track or constructing additional track, including all grading and construction of or alterations to incidental features required to complete these extensions.

(b) Work necessary to increase the existing designed standard when necessitated by traffic demands greater than those of the original design.

(c) Removal or obliteration of railroads causing a net decrease in base data. Excluded from this category is removal of railroad facilities done as part of a project classified as maintenance and repair or restorations necessitated by disaster.

(d) Initial construction of railroads as new units of real property built separate and apart from

existing facilities.

(2) Restorations necessitated by disaster include reconstruction necessary to replace wholly or in part railroad facilities damaged by fire, flood, storm, or other disasters. Facilities damaged by such operational accidents as derailment and the like are excluded from this category and classified as maintenance and repair.

59. Utilities Plants and Systems

a. Maintenance and Repair. Maintenance and repair of utilities plants and systems include all work necessary to place or continue such existing facilities in good and usable condition not to exceed the design standard indicated in real property records. Exceptions to the limitation not to exceed the design standard are made when work exceeding that standard is essential to maintain existing facilities efficiently in the use and serving the requirements for which originally designed. Replacement of defective equipment is maintenance and repair even though the replacement may result in facilities better than the original when new if not made to serve added requirements or new uses. Examples of maintenance and repair include the following:

(1) Replacing an 8-inch water main which has failed or lost a part of its original carrying capacity.

The replacement main is usually the same size as the existing main, but it need not follow the alignment of the original main. (Classified as maintenance and repair because the replacement is necessary to place the distribution system in good and usable condition and not for serving added requirements.)

- (2) Replacing a worn-out pump. (This is maintenance and repair for the same reasons cited for the water main.) The capacity of the replacement pump may vary somewhat from the capacity of the original pump. However, the replacement of an existing pump with one of different characteristics to obtain economical operation or increased capacity because of changed usage is new work.
 - (3) The replacement of sand in a water filter.
- (4) Replacing such defective, worn-out, or deteriorated electric equipment as poles, insulators, transformers, lighting arrestors, oil circuit breakers.
- (5) Replacing defective, worn-out, or deteriorated heating equipment and pumps, instruments and controls, space heaters, warm-air furnaces, and the like.
- (6) Replacing old boilers with new boilers of equivalent ratings. Because of the age of the old boilers, they must be operated at a reduced pressure insufficient for proper operation of the equipment served. (Classified as maintenance and repair because new boilers are required to place the heating plant in good and usable condition and to serve the requirements for which originally intended, not for serving added requirements.)

(7) Replacing gas-fired furnaces with new furnaces; removal of gas-fired furnaces and replacement with steam-heating system; and replacing automatic controls. Replacements are required because of the age and condition of present equipment. In its present condition, the equipment requires excessive maintenance and constitutes a fire hazard because of improper installation, broken furnace casings and heating chambers, and lack of safety controls and pressure regulators. (This is maintenance and repair because the replacements are necessary to place the heating systems in good and usable condition, not for serving added requirements.)

(8) Moving air-cooled compressor unit of a prefabricated refrigerator to an outside wall, installing a louver in wall for supply of cool air to reduce excessive head pressure and overload of compressor unit. (This is maintenance and repair because the work is required to correct an operating deficiency and permit economical maintenance of the plant to

meet original requirements.)

(9) Replacing an air-cooled condenser with a water-cooled condenser to eliminate overloading a compressor unit where the surrounding air temperature is too high for the air-cooled unit to function properly. (This is maintenance and repair for reasons stated in the example above.)

(10) Re-covering the exterior of a prefabricated refrigerator with a new vapor barrier and sheathing of celotex to prevent penetration of moisture and reduce operating temperature to the proper (This is maintenance and repair because the work is required to correct a structural deficiency in a plant to permit its serving the original requirements.)

b. OPERATION. (1) Included. Operation, when applied to utilities plants and systems includes the

following:

(a) Expenditure of labor for personnel, including supervisors, assigned to operate utilities plants, equipment, and systems. If operators or supervisors are assigned to more than one type of utilities plant, such as water-pumping plants and water-filtration plants, labor costs are equitably distributed to the applicable accounts.

(b) Labor to perform first and second echelon maintenance, inspections, lubrication, adjustments, and light repair of utilities plants and

systems.

(c) Labor of general heating mechanics who instruct firemen and perform inspections, preventive maintenance, adjustments, and light repairs on heating systems, including the internal distribution systems, radiators, valves, traps, and the like in buildings.

(d) Such operating supplies as chemicals, lu-

bricants, wiping rags, and the like.

(2) Excluded. Excluded from operations are the following:

(a) Fuel and power consumed.

(b) Materials and repair parts used to effect

any echelons of maintenance.

c. New Work. New work includes additions and alterations to and deletions from existing facilities, new construction, and restorations necessitated by disaster.

(1) Additions, alterations, deletions, and new construction for utilities plants and systems

include the following:

(a) The extension of existing distribution and collection systems such as overhead and underground electric distribution systems, steam and gas distribution systems, water mains and services, sewer mains and laterals and the like, and supplementing plants with added equipment to increase plant capacity. Additions to utility plants and systems usually increase their base data.

(b) All changes in unit arrangement and changes to existing utility plants or systems to accomplish increases in efficiency of operation in excess of that originally intended. Such changes are usually required to meet increased service demands.

(c) Initial installation of permanently installed equipment and the installation of additional

equipment.

(d) Removal wholly or in part of existing facilities and equipment when their replacement is not contemplated, except that items removed in conjunction with maintenance and repair projects are chargeable to the applicable maintenance and

repair account.

(e) Initial construction of utility plants and facilities as new units of real property built separate and apart from existing facilities.

(f) Typical examples are listed below.

1. Replacing an 8-inch water main with a 10-inch water main to provide additional water to meet increased demands.

2. Installing a 12-inch water main on one side of the street to replace an existing unserviceable 8-inch main. (This is an addition because the replacement by a larger main was necessary to provide additional water to meet increased demands.)

3. Addition of a pump in the water-

pumping station.

4. Installing facilities for a surface wash in a water filter or installing a recording meter in a water or sewage plant

having no recording meter.

5. Installing flood lighting to reduce switching hazards in the rail-classification vard. (Classified as an addition to existing facilities because lighting facilities have been increased to meet added requirements resulting in an increase in base data.)

6. Installing new wiring, lighting facilities, and 20-hp motor-driven car pullers. Changes made to correct hazardous condition of existing lighting circuits and increase the circuit enough to bring the lighting to the minimum required to meet present expanded activity. Car pullers installed to replace tractors because of damage caused to tractors by this type of use. (Classified as an alteration because this work was necessary to meet service demands greater than originally intended.)

7. Installing a stoker for conserving fuel or manpower or increasing plant capac-

8. Installing instruments on heating-plant

boilers not so equipped.

9. Constructing an 8-inch steam main and a 3-inch condensate line to interconnect hospital boiler plants, eliminating the necessity of operating both boiler plants at all times. (Classified as an alteration because this work consititutes a major change in heating arrangement to increase efficiency of operation.)

10. Replacing compressor unit and cooling coils in a refrigerator with larger-size equipment to permit lower temperatures than possible with existing 29 Sep 45 TM 5-602

equipment, providing storage for frozen food.

11. Adding a unit cooler, increasing speed of compressor unit, and constructing additional refrigeration space for food storage in a mess hall to provide for increase in persons messed.

12. Adding an air conditioning unit to cool a space where an increased internal heat load has been added over that for which the equipment was originally designed.

(2) Restoration necessitated by disaster include reconstruction necessary to replace in whole or in

part utilities facilities damaged by fire, flood, explosion, and the like.

60. Verification of Coding

To permit application of correct account codes, work-order clerks must be familiar with work to be done as well as factors necessitating the work. The cost accountant must regularly check work orders to insure correct coding. In this connection, the work-order clerk and cost accountant must consult with appropriate technical personnel, especially with regard to assigning account codes to nonroutine jobs.



CHAPTER 11 ACCOUNTS

61. Chart of Accounts		Paramanh
PERMANENT BUILDINGS:	Base data	Paragraph reference
610-11 Quarters	Square feet	64
610-12 Barracks and dormitories	Square feet	65
610-13 Mess halls	Square feet	66
610-14 Storage buildings	Square feet	67
610-15 Administration buildings	Square feet	68
610-16 Technical maintenance shaps	Square feet	69
610-17 Hospital technical buildings	Square feet	70
610-18 Miscellaneous buildings	Square feet	71
TEMPORARY BUILDINGS—CANTONMENT TYPE:	1	• -
610-21 Quarters	Square feet	72
610-22 Barracks and dormitories	Square feet	73
610–23 Mess halls	Square feet	74
610-24 Storage buildings	Square feet	7 5
610-25 Administration buildings	Square feet	76
610-26 Technical maintenance shops	Square feet	77
610-27 Hospital technical buildings	Square feet	78
610-28 Miscellaneous buildings	Square feet	79
TEMPORARY BUILDINGS—THEATER-OF-OPERATIONS TYPE:		
610-31 Quarters	Square feet	80
610-32 Barracks and dormitories	Square feet	81
610-33 Mess halls	Square feet	82
610-34 Storage buildings	Square feet	83
610-35 Administration buildings	Square feet	84
610-36 Technical maintenance shops	Square feet	85
610-37 Hospital technical buildings	Square feet	86
610-38 Miscellaneous buildings	Square feet	87
STRUCTURES:	•	
610-40 Hutments	Square feet	88
610-50 Tents	Square feet	89
610-70 Wharves and approaches	None	90
610–90 Other structures	None	91
GROUNDS:		
611–10 Improved grounds	Acres	93
611-20 Other post areas	Acres	94
611-30 Dust and erosion control	None	95
ROADS, SURFACED AREAS, AND WALKS:		
612-10 Concrete roads	Square yards	97
612-21 Bituminous roads—high type	Square yards	98
612-22 Bituminous roads—low type	Square yards	99
612–30 Miscellaneous roads	Square yards	100
612-40 Parking and open-storage areas	Square yards	101
612-50 Walks	Square yards	102
AIRFIELD PAVEMENTS:	~	
613–11 Concrete	Square yards	104
613-12 Bituminous—high type	Square yards	105
613-13 Bituminous—low type	Square yards	106
613-14 Miscellaneous airfield pavements	Square yards	107
RAILROADS:	T ' .	
614-00 Railroads	Linear feet	108
FIRE PROTECTION:	1.6	
615–10 Fire personnel	Man hours	110
615–20 Fire trucks	Number	111
615-60 Miscellaneous fire-fighting equipment and services	None	112

INCREM RODDING AND VERDAGIN COMMENT	D 1.	Paragraph
INSECT, RODENT, AND VERMIN CONTROL:	Base data	reference
616-10 Insect and rodent control—buildings and structures	Square feet	114
616–20 Insect and rodent control—grounds WATER SYSTEMS:	Acres	115
620–10 Distribution mains and services	Linear feet	117
620–31 Water-pumping plants—operation	1000 gallons	117
620-32 Water-pumping plants—maintenance and repair	1000 gallons	120
620-41 Water-filtration plants—operation	1000 gallons	122
620-42 Water-filtration plants-maintenance and repair	1000 gallons	123
620-45 Miscellaneous water treatment	None	124
620-50 Purchased water	1000 gallons	125
SEWER SYSTEMS:	7.	
621-10 Sanitary sewers	Linear feet	127
621-30 Storm sewers	Linear feet	128
621-40 Sewage-pumping plants—operation, maintenance, and	Number stations	129
repair 621-51 Sewage-treatment plants—operation	1000 gallons	131
621-52 Sewage-treatment plants—maintenance and repair	1000 gallons	132
621-60 Miscellaneous sewage disposal	None	133
ELECTRIC SYSTEMS:	1,020	100
622-11 Generating plants—operation	KWH	136
622-12 Generating plants—maintenance and repair	KWH	137
622-20 Overhead electric distribution lines and services	Linear feet	138
622-30 Underground electric distribution lines and services	Linear feet	139
622-40 Exterior lighting	Number lights	140
622-50 Distribution transformers	KVA capacity	141
622-60 Substations	KVA capacity KWH	142
622-70 Purchased electrical energy GAS SYSTEMS:	V M U	143
623-10 Distribution mains and services	Linear feet	145
623-21 Gas-generating plants—operation	Therms	147
623-22 Gas-generating plants—maintenance and repair	Therms	148
623-30 Purchased gas	Therms	149
HEATING SYSTEMS:		
624-30 Purchased steam	1,000 pounds	15 1
624-41 Heating systems—hospital, operation	Tons fuel	153
624-42 Heating systems—hospital, maintenance and repair	Tons fuel	154
624-51 Heating systems—laundry, operation	Tons fuel	156
624-52 Heating systems—laundry, maintenance and repair	Tons fuel	157
624-61 Heating systems—other, 100-hp and over—operation 624-62 Heating systems—other, 100-hp and over—maintenance	Tons fuel Tons fuel	159 160
and repair.	I Olis Tuel	100
624-71 Heating systems—other, less than 100-hp—operation	Tons fuel	162
624-72 Heating systems—other, less than 100 hp—maintenance	Tons fuel	163
and repair.		
ICE MANUFACTURING AND COLD STORAGE:		
625-00 Ice manufacturing and warehouse cold-storage plants—	HP capacity	164
operation, maintenance, and repair.	TID '	
626-00 Miscellaneous refrigeration and air-conditioning systems	HP capacity	165
REFUSE AND WASTE DISPOSAL:	Cubia warda	160
627-11 Incinerators—operation 627-12 Incinerators—maintenance and repair	Cubic yards Cubic yards	168 169
627-20 Refuse collection and can washing	Cubic yards	170
627–30 Sanitary fill	Cubic yards	171
627-40 Purchased refuse disposal	None None	172
627-50 Other disposal methods	Cubic yards	173
FUEL OTHER THAN GAS AND MOTOR FUEL:	-	
628-11 Coal issued	Tons	175
628–12 Fuel oil issued	1,000 gallons	176
628–13 Other fuel issued	None	177
628-21 Coal storage and distribution	Tons handled	178
628-22 Fuel storage and distribution—other than coal	None	179



		Paragraph
FUEL OTHER THAN GAS AND MOTOR FUEL—Continued.	Base data	reference
629-10 Aircraft fuel storage and dispensing systems	1,000-gallon capacity	181
629-20 Gasoline storage and dispensing systems—other than aircraft	1,000-gallon capacity	182
629-30 Petroleum products storage and dispensing systems—other	1,000-gallon capacity	183
than gasoline	-, · · · · · · · · · · · · · · · · · · ·	
INSTALLED KITCHEN EQUIPMENT:	3.7	
630-00 Installed kitchen equipment OFFPOST MINOR LEASED FACILITIES:	None	184
631-10 Offpost minor leased facilities—maintenance, repair, and	None	186
operation	None	100
631-20 Offpost minor leased facilities—new work	None	187
OFFPOST MINOR GOVERNMENT-OWNED FACILITIES:		
632-10 Offpost minor Government-owned facilities—maintenance,	None	188
repair, and operation 632–20 Offpost minor Government-owned facilities—new work	None	189
MISCELLANEOUS ITEMS:	None	109
634–11 Undistributed costs	None	191
634–12 Snow removal	None	192
634-13 Packing and crating	None	193
634-14 Signs—fabrication and repair	None	19 4
634-15 Training aids	None	195
634–16 Material production	None	196
634–17 Furniture and wall lockers	None	197
634–18 Custodial and janitorial services	Man hours	198
634–19 Elevators—maintenance and repair	Number	199
NEW WORK—PROJECTS \$1000 AND UNDER:	37	
635-10 Additions, alterations, deletions, and new construction NEW WORK—PROJECTS OVER \$1000:	None	201
635–20 Additions, alterations, and deletions	None	202
NEW WORK—RESTORATIONS NECESSITATED BY DIS-	210.10	202
ASTER:		
635-30 Restorations necessitated by disaster	None	203
FORTIFICATIONS:		205
640-10 Battery structures	Square feet	205
640–20 Other structures	Square feet	206
640-30 Mechnical and power facilities	None	207
640–40 Other facilities	None	208
640-90 New work PASSIVE PROTECTION:	None	209
650-00 Passive protection	None	210
SHOP OVERHEAD:	None	210
661-10 Carpenter shop	Man-hours	212
661-20 Paint shop	Man-hours	213
661–30 Storehouse	Man-hours	214
661–40 Machine shop	Man-hours	215
661-50 Electric shop	Man-hours	216
661-60 Plumbing and steam-fitting shop	Man-hours	
661-70 Sheet-metal and heating-equipment shop	Man-hours	217
661–80 Other shops	Man-hours	218
661–90 General labor crew	Man-hours	219
POST ENGINEER MAINTENANCE MACHINERY, TOOLS,	Man-nours	220
ETC.:		
662-00 Maintenance machinery, tools, etc.—maintenance and	None	22 1
repair DECEMBAND DECEMBAND		
PROPERTY SALVAGED AND DESTROYED:	NT	225
664–00 Property salvaged and destroyed ANNUAL AND SICK LEAVE TAKEN:	None	222
	Man-hours	000
669–00 Annual and sick leave taken POST ENGINEER OFFICE:	MIRTAL HOURS	223
670-00 Post engineer office	Man-hours	224
0.0-00 I ost engineer omce	141911-110012	24 4

DEBIT RECONCILIATION ACCOUNTS:		Paragraph
TOTAL COST THIS FISCAL YEAR TO DATE:	Base data	reference
680-10 Main post	None	226
680–20 Subposts	None	227
680-30 Deleted facilities	None	228
680–40 Transferred facilities	None	229
PRIOR YEARS' COSTS:		
681-10 Prior years' costs—feature accounts	None	2 30
681-20 Prior years' costs—reconciliation accounts INVENTORIES:	None	2 31
682-10 Expendable and class P property	None	233
682-20 Accountable MR property—other than power-operated	None	234
maintenance equipment		
682-30 Accountable MR property—power-operated maintenance equipment	None	2 35
682–40 Fuel	None	2 36
682-90 Inventory adjustments	None	237
COSTS INCURRED FOR OTHERS:		
683-10 Accounts receivable	None	238
683–20 Without reimbursement	None	239
683-40 Excess property transferred	None	240
UNEXPENDED ALLOTMENTS:		
684-00 Unexpended allotments	None	241
COLLECTIONS:	_	
686-00 Collections	None	242
CREDIT RECONCILIATION ACCOUNTS:		
RENTALS AND OTHER REVENUE:		
695-00 Rentals and other revenue	None	243
ALLOTMENTS RECEIVED:		
697-10 Allotments received—this fiscal year to date	None	244
697-20 Allotments received—prior fiscal years	None	245
ACCOUNTS PAYABLE:	37	
698-10 Accounts payable—materials, supplies and nonpersonal	None	247
services	37	
698-20 Accounts payable—pay rolls	None	248
COSTS NOT CHARĞEABLE TO POST REPAIRS AND UTILI-		
TIES FUNDS:	Mars 1,	050
699-10 Costs not chargeable to post repairs and utilities funds—	Man-hours	250
labor	None	051
699-20 Costs not chargeable to post repairs and utilities funds—	None	25 1
materials and supplies	None	252
699-30 Costs not chargeable to post repairs and utilities funds—	None	202
machinery and equipment 699-40 Costs not chargeable to post repairs and utilities funds—	None	253
	None	200
fuel 699–50 Costs not chargeable to post repairs and utilities funds—	None	254
other	110116	204
699-60 Costs not chargeable to post repairs and utilities funds—	None	255
facilities received by transfer	740116	200

62. Use

The accounts listed in paragraph 61 are prescribed for cost-accounting purposes. Code numbers are

given at the left before the title of the account. The paragraph references refer to chapter 12, where the accounts are described in detail.



CHAPTER 12

DESCRIPTION OF ACCOUNTS

Section I. BUILDINGS AND STRUCTURES

63. General

a. Included. The designation Buildings and

structures includes the following:

(1) Permanent and temporary buildings classified according to predominant use of individual units of construction. If large industrial, storage, hospital, and similar units are also used to considerable extent for other purposes such as administration and housing, such buildings and appropriate sections thereof are classified by the responsible command.

(2) Accessory structures such as sheds, coal bins, loading platforms, ramps, porches, covered and enclosed hospital walks, and other related facilities attached to buildings. Covered and enclosed hospital walks are considered to be at-

tached to hospital technical buildings.

(3) Utilities distribution systems inside buildings, as follows:

(a) Interior water lines from the building line.

(b) Interior sanitary-sewer lines from the build-

(c) Interior electric wiring from the switching

device or meter.

(d) Interior gas lines from the building line.

(e) Interior steam and hot-water distribution lines including steam unit heaters, radiators, traps, and valves from the low-pressure side of a highpressure system, or the branch main take-off at the building wall in a low-pressure system.

Note. Pressure-reducing stations, condensate and vacuum pumps, flash tanks, and condensate-receiving tanks are always excluded from building accounts (par. 150a (4)). The labor cost of general heating mechanics who instruct firemen and inspect generating and distribution heating equipment is also excluded from building accounts (par. 150a(3)(b).

(f) Hot-air ducts and grilles outside of the furnace room, flues, smokestacks, and roof jacks.

(g) Ventilating and evaporative (desert type)

cooling systems.

(4) That installed equipment for which the post engineer is responsible, excluding equipment referred to in paragraph 63b.

(5) Hutments, tents, wharves, and approaches, and other structures (pars. 88 through 91).

b. Excluded from buildings and structures accounts are the following:

(1) All new work as defined in chapter 10.

(2) Custodial and janitorial services (par. 198). (3) Elevator maintenance and repair (par. 199).

(4) Shop equipment (par. 221).

(5) Heating equipment (pars. 150 through 163).

(6) Ice-manufacturing, cold storage, miscellaneous refrigeration and air-conditioning equipment (pars. $16\bar{4}$ and $16\bar{5}$).

(7) Installed kitchen equipment (par. 184).

c. Type of Construction. To reflect maintenance cost adequately, buildings accounts are grouped as follows:

Permanent buildings.

(2) Cantonment type buildings.(3) Theater-of-operations type buildings.

(4) Hutments.

(5) Tents.

Note. Buildings are identified as to type of construction in accordance with TM 5-601 (when published).

d. Type of Usage. In addition to classification by type of construction, buildings other than hutments and tents are each segregated according to building usage:

(1) Quarters.

Examples: Apartment Nurses Civilian houses Officers quarters and Company officer mess Detached, including Regimental comgarage mander Farm houses Semidetached Field officer Warrant officers Major general

(2) Barracks. Examples:

Enlisted men Civilian dormitories Flying cadet

Medical detachment

(3) Mess halls. Examples:

Enlisted men Enlisted men's cafe-

teria Flying cadet Medical detachment

Nurses Officers

(4) Storage buildings.

Examples: Armament building Depots:

> Ammunition ordnance Gasoline and oil General supply,

> > ordnance

Officers and nurses cafeteria

Officers and recreation

Patients

Prisoner

Prison guard Stable guard

Prisoners and guards

Depots—Continued. Remount

Signal Corps Supply Igloos

Ice-storage building

Sheds

29 Sep 45

29 Sep 45	
Stables	Storehouses-Con.
Storehouses:	Reception cen-
Ballon	<u> </u>
Bomb	ter Weepen
	Weapon
Bombsight Chemical war-	Warehouses:
•	Air corps
fare	Clothing
Clothing issue	General
Engine	Inert
Hospital Inflammable	Refrigerated Rubber
Ordnance	
	Standard and
Paint and oil	Standard ord-
Pontoon bridge	nance
(5) Administration building	ngs.
Examples:	
Administration and	Headquarters—Con.
clinic	Post
Administration and	Regimental
receiving	Wing
Finance	Wing and Post
General	Machine records unit
Headquarters:	Post office
Base	Quartermaster
Company	Utilities
Division Division	Cultures
	7
(6) Technical maintenance	e shops.
$oldsymbol{Examples}:$	
Technical shops:	Technical mainte-
Airplane repair	nance buildings-
Base engineer	Continued.
maintenance	Engine test
and inspection	Motor repair
Hangars	Ordnance repair
Technical mainte-	Parachute in-
nance buildings	spection
Armament in-	Plane repair
strument in-	Radio repair
spection and	Salvage repair
adjustment	Tank repair
Engine repair	Wind tunnels
(7) Hospital technical build	lings.
Examples:	
Clinic	Vacuum pumping
Dental	station
Dispensary	Veterinary
Infirmary	Ward
Morgue	X-ray
Neuropsychiatric	X-ray and medical
Pharmacy	library
Physiotherapy	Covered and in-
Special	closed connecting
Surgery	corridors
(8) Miscellaneous building	18.
Examples:	Dallaan sammassan

Bomb trainer	Railroad
Chapel	Reclamation
Clothing and equi-	Recreation
page	Arena
Cold storage plant	${f Bandstand}$
Commissary	${f Field\ house}$
Dispatcher house	Guest house
Dog house	Hostess house
Electric	Medical detach-
Employees' and ser-	ment
vants' quarters	Officers' club
Fire	Officers' lounge
Gas	Patients
Gas instruction	Recreation
General purpose	$\operatorname{\mathbf{Red}}\operatorname{\mathbf{Cross}}$
Greenhouse	Regimental ex-
Hose house	change
Hospital	Service club
Carpenter	Theater
Furniture and	Root cellar
_ equipment	Saw mill
Leather	Scale house
Metal and ma-	Schools
chine work	Sentry box
Plasterer	Sewage pumping
Shade	plant
Seamstress	Sewage treatment
Woodworking	plant
Ice plant	Shoe repair
Incinerator	Tailor shop
Laboratories	Telephone and tele-
Latrines	graph building
Laundry	Transformer house
Libraries	Utilities
Link trainer	Blacksmith
Magazine Oil and lubrication	Carpenter
Ordnance	Electrician Gardener
Paint	
Parachute building	Heavy equip-
Photographic labora-	ment Mason
tory	Machine
Pigeon loft	Paint
Post exchanges	Plumber
Powerhouse	Sheet metal
Processing	Steam fitter
Radio control tower	Water pumping plant
Radio station	Water treatment
Radio shelter	plant
Radio transmitter	Wash rack
e. BASE DATA. Square	feet is the unit of

e. Base Data. Square feet is the unit of measure for the total floor area of all post buildings of the type and use given in the account title as recorded on the real-property records (exception, accounts 610-70, wharves and approaches, and 610-90, other structures, have no base data).

Examples: Base data for account 610-23, cantonment type buildings-mess halls, are square feet of total floor area of all cantonment-type mess halls on the post as recorded in the real-property records.

Balloon compressor

building

Barber shop

Bathhouse

Boilerhouse

Animal house

control

Bakery

Armored force

Armament and fire

TM 5-602 29 Sep 45

64. Account 610-11, Permanent Quarters

To this account is charged the cost of maintenance and repair of all permanent type quarters on the post.

65. Account 610–12, Permanent Barracks and Dormitories

To this account is charged the cost of maintenance and repair of all permanent type barracks and dormitories on the post.

66. Account 610-13, Permanent Mess Halls

To this account is charged the cost of maintenance and repair of all permanent type mess halls on the post.

67. Account 610-14, Permanent Storage Buildings

To this account is charged the cost of maintenance and repair of all permanent type storage buildings on the post.

68. Account 610-15, Permanent Administration Buildings

To this account is charged the cost of maintenance and repair of all permanent type administration buildings on the post.

69. Account 610–16, Permanent Technical Maintenance Shops

To this account is charged the cost of maintenance and repair of all permanent type technical maintenance shops on the post.

70. Account 610-17, Permanent Hospital Technical Buildings

To this account is charged the cost of maintenance and repair of all permanent type hospital technical buildings including permanent type covered and inclosed hospital walks on the post.

71. Account 610–18, Permanent Miscellaneous Buildings

To this account is charged the cost of maintenance and repair of all permanent type miscellaneous buildings on the post.

72. Account 610-21, Cantonment Type Quarters

To this account is charged the cost of maintenance and repair of all cantonment type quarters on the post.

73. Account 610–22, Cantonment Type Barracks and Dormitories

To this account is charged the cost of maintenance and repair of all cantonment type barracks and dormitories on the post.

74. Account 610-23, Cantonment Type Mess Halls

To this account is charged the cost of maintenance and repair of all cantonment type mess halls on the post.

75. Account 610-24, Cantonment Type Storage Buildings

To this account is charged the cost of maintenance and repair of all cantonment type storage buildings on the post.

76. Account 610-25, Cantonment Type Administration Buildings

To this account is charged the cost of maintenance and repair of all cantonment type administration buildings on the post.

77. Account 610-26, Cantonment Type Technical Maintenance Shops

To this account is charged the cost of maintenance and repair of all cantonment type technical maintenance shops on the post.

78. Account 610-27, Cantonment Type Hospital Technical Buildings

To this account is charged the cost of maintenance and repair of all cantonment type hospital technical buildings, including cantonment type covered and inclosed hospital walks, on the post.

79. Account 610–28, Cantonment Type Miscellaneous Buildings

To this account is charged the cost of maintenance and repair of all cantonment type miscellaneous buildings on the post.

80. Account 610-31, Theater-of-Operations Type Quarters

To this account is charged the cost of maintenance and repair of all theater-of-operations type quarters on the post.

81. Account 610–32, Theater-of-Operations Type Barracks and Dormitories

To this account is charged the cost of maintenance and repair of all theater-of-operations type barracks and dormitories on the post.

82. Account 610-33, Theater-of-Operations Type Mess Halls

To this account is charged the cost of maintenance and repair of all theater-of-operations type mess halls on the post.

83. Account 610-34, Theater-of-Operations Type Storage Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type storage buildings on the post.

84. Account 610-35, Theater-of-Operations Type Administration Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type administration buildings on the post.

85. Account 610-36, Theater-of-Operations Type Technical Maintenance Shops

To this account is charged the cost of maintenance and repair of all theater-of-operations type technical maintenance shops on the post.

86. Account 610-37, Theater-of-Operations Type Hospital Technical Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type hospital technical buildings, including theater-ofoperations type covered and inclosed hospital walks, on the post.

87. Account 610-38, Theater-of-Operations Type Miscellaneous Buildings

To this account is charged the cost of maintenance and repair of all theater-of-operations type miscellaneous buildings on the post.

88. Account 610-40, Hutments

To this account is charged the cost of maintenance and repair of all hutments on the post.

89. Account 610-50, Tents

The designation *Tents* includes flooring, framework, doors, screens, and other component parts. Tent stoves and canvas are *not* included in this account. To this account is charged the cost of *maintenance and repair* of all tents on the post.

90. Account 610-70, Wharves and Approaches

To this account is charged the cost of maintenance and repair of all wharves and water approaches on the post.

a. Included. The designation Wharves and approaches includes wharves, sea walls, ferry slips, jetties, bulkheads, breakwaters, channels, docks, dock warehouses, causeways, and similar structures along waterways and the water approaches.

b. BASE DATA. None.

91. Account 610-90, Other Structures

To this account is charged the cost of maintenance and repair of all other structures on the post.

a. INCLUDED. The designation Other structures includes swimming pools (except water-filtration and circulation equipment), animal-watering facilities, fences, fence alarm systems, walls, gates, flag poles, detached loading platforms, ramps, coal bins, and similar structures not otherwise accounted for. This account is not to be confused with accounts 610–18, 610–28, and 610–38 prescribed to include miscellaneous buildings.

b. BASE DATA. None.

Section II. GROUNDS

92. General

Grounds within the limits of the military reservation are classified as indicated in paragraphs 93 through 95.

93. Account 611-10, Improved Grounds

The designation Improved grounds includes grounds adjacent to buildings, structures, roads, runways, and the like upon which grass is cut, leaves raked, dust and erosion control measures maintained, or on which intensive grounds maintenance is performed.

- a. Included in this account is the cost of the following:
- (1) Maintenance, including sodding, planting, and mulching, of grassed runways, lawns, post cemeteries (including opening and closing of graves), parade grounds, bridle paths, parkways, athletic fields, recreational areas, agricultural lands, areas on landing fields adjacent to airfield pavements, and grounds for rifle and pistol ranges. Retaining walls, levees, riprap, irrigation ditches, subsurface field drains, and open ditches, excepting those accessory to roads, railroads, wharves, parking areas, open-storage areas, walks, and areas designated as other post areas (par. 94).
- (2) Mowing of all grass within the improved area of the post.
- (3) Maintenance of agricultural lands, such as hayfields, pastures, orchards, vineyards, and the like. Reseeding with annual grains, cultivating, fertilizing, spraying, pruning, and seeding of cover crops, and other practices essential to crop maintenance.
- (4) Removal of such debris as rocks and wire that interfere with grass mowing; maintenance of dust-control measures on nontraffic areas; essential spraying and pruning of trees and shrubs within improved areas.
- (5) Operation of greenhouses at installations, where such work is a repairs and utilities responsibility in accordance with War Department policy.
- b. EXCLUDED. Excluded from this account are costs of the following:
- (1) Original dust and erosion control projects (par. 95).
- (2) Insect and rodent-control activities on grounds (par. 115).
- (3) Cultivation and harvesting of post gardens. This is not a repairs and utilities responsibility.
- (4) Snow removal and maintenance and repair of snow fences (par. 192).
- c. Base Data. Acres is the unit of measure and includes all improved areas on the post except areas covered by buildings, roads, railroads, walks, parking and open-storage areas, airfield pavements, etc.



94. Account 611-20, Other Post Areas

The designation Other post areas includes wooded areas, meadows, lakes, ponds, gullies, streams, trails, gulches, deserts, swamps, marshes, cutover timber lands, burned-over areas, shore lines, artillery ranges, maneuver areas, grounds in connection with bombing ranges, and similar areas not requiring intensive maintenance work and not included in improved grounds.

a. Included in this account is the

cost of the following:

(1) Maintenance of other post areas, including retaining walls, riprap, open ditches, irrigation ditches, and the like located in areas excluded from improved grounds and not accessory to roads, railroads, wharves, etc.

(2) Mowing of grass along roadways, railroads,

etc., located in other post areas.

(3) Maintenance of firebreaks located in other post areas.

b. Excluded from this account is the cost of the following:

(1) Original dust and erosion control projects

(2) Insect and rodent control activities on

grounds (par. 115). (3) Cultivation and harvesting of post gardens.

(4) Snow removal and maintenance and repair

of snow fences (par. 192).

c. Base Data. Acres is the unit of measure and includes all areas on the post except those classified improved grounds and areas covered by buildings, roads, railroads, walks, parking and open-storage areas, airfield pavements, etc.

95. Account 611-30, Dust and Erosion Control

a. Included in this account is the cost of all dust and erosion control projects on nontraffic areas until control is firmly established, including grading, leveling, terracing, seeding, mulching, oiling, graveling, and other treatments.

b. Excluded. Excluded from this account is

the cost of the following:

(1) Maintenance of completed dust and erosion control projects, chargeable to accounts 611-10 or

611-20 as applicable.

(2) Reseeding with annual grains; cultivating, fertilizing, spraying, seeding of cover crops, and other cultural practices essential to crop maintenance on agricultural lands. These operations are chargeable to account 611-10.

c. Base Data. None.

Section III. ROADS

96. General

a. Included. The designation Roads includes the following:

(1) All graded, surfaced, or paved roads, streets, service drives, and alleys.

(2) Features considered incidental to roads

such as shoulders, open ditches, slopes, culverts, bridges, trestles, underdrains, curbs, gutters, flumes, riprap, guardrails, retaining walls, pavement markings, traffic signals, etc.

b. Excluded from roads are the

following:

(1) Storm sewers (par. 128).

(2) Snow removal, ice alleviation, and snow fences (par. 192).

(3) Signs (par. 194).(4) Mowing of grass adjacent to roads (pars. 93 and 94).

(5) Maintenance equipment (par. 221).

97. Account 612-10, Concrete Roads

To this account is charged the cost of maintenance and repair of all concrete roads on the post.

a. Included. The designation Concrete includes cement concrete, brick, block, and comparable

rigid movements.

b. BASE DATA. Square yards is the unit of measure for the total surfaced area of all concrete roads on the post as recorded on the realproperty records.

98. Account 612-21, Bituminous Roads—High Type

To this account is charged the cost of maintenance and repair of all high type bituminous roads on the post.

The designation Bituminous a. Included. roads—high type includes all hot-mix and cold plant-mix bituminous surfaces 2 inches thick or more built on rigid bases or substantial flexible bases and bituminous pavements of a comparable class of construction.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all high type bituminous roads on the post as recorded

on the real-property records.

99. Account 612-22, Bituminous Roads—Low Type

To this account is charged the cost of maintenance and repair of all low type bituminous roads on the post.

a. Included. Bituminous roads—low type includes bituminous pavements other than those

included in account 612-21.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all low type bituminous roads on the post as recorded on the real-property records.

100. Account 612-30, Miscellaneous Roads

To this account is charged the cost of maintenance and repair of all miscellaneous roads on the post.

a. Included. The designation Miscellaneous roads includes gravel, natural soil, stabilized, and roads other than those in accounts 612-10, 612-21, and 612-22.

b. Base Data. Square yards is the unit of measure and includes the entire surfaced area or the area maintained for traffic, exclusive of appurtenant shoulders, of all miscellaneous roads on the post as recorded on the real-property records.

Section IV. PARKING AND STORAGE AREAS AND WALKS

101. Account 612-40, Parking and Open-Storage Areas

To this account is charged the cost of maintenance and repair of all graded, surfaced, or paved parking and open-storage areas on the post.

a. INCLUDED. The designation Parking and

open-storage areas includes the following:

(1) All graded, surfaced, or paved parking areas, open-storage areas, motor parks, and warehouse and igloo aprons (except covered or inclosed areas).

(2) Features considered incidental to parking and open-storage areas such as underdrains, curbs, gutters, guardrails, pavement markings, etc.

b. Excluded from parking and

open-storage areas are the following:

(1) Storm sewers (par. 128).

(2) Snow removal, ice alleviation, and snow fences (par. 192).

(3) Signs (par. 194).

(4) Grounds adjacent to parking and openstorage areas (par. 93).

(5) Maintenance equipment (par. 221).

c. Base Data. Square yards is the unit of measure and includes the total area of all parking and open-storage areas on the post as recorded on the real-property records.

102. Account 612-50, Walks

To this account is charged the cost of maintenance and repair of all walks on the station.

a. Included. The designation Walks includes

the following:

- (1) All graded, surfaced, paved, or duckboard walks.
- (2) Features considered incidental to walks such as stairs, handrails, footbridges, etc.
- b. Excluded. Excluded from this account are the following:
 - (1) Snow removal and ice alleviation (par. 192).

(2) Signs (par. 194).

(3) Grounds adjacent to walks (par. 93).

(4) Bridle paths (par. 93).

(5) Maintenance equipment (par. 221).

(6) Covered and inclosed hospital walks (pars.

70, 78, and 86).

c. Base Data. Square yards is the unit of measure and includes the total area of all walks on the post as recorded on the real-property records.

Section V. AIRFIELD PAVEMENTS

103. General

- a. Included. The designation Airfield pavements includes the following:
- (1) All paved, surfaced, or stabilized (other than grassed) airfield runways, taxiways, aprons, hardstandings, and shoulders.

(2) Features considered incidental to airfield pavements such as subgrade drains, pavement

markings, and delineators.

b. Excluded. Excluded from airfield pavements are the following:

(1) Storm sewers (par. 128).

(2) Snow removal, ice alleviation, and snow fences (par. 192).

(3) Signs (par. 194).

(4) Grounds adjacent to airfield pavements (par. 93).

(5) Maintenance equipment (par. 221).

104. Account 613-11, Airfield Pavements-Concrete

To this account is charged the cost of maintenance and repair of all concrete airfield pavements on the post.

a. INCLUDED. The designation Concrete includes cement concrete and other rigid types of surface.

b. Base Data. Square yards is the unit of measure and includes the total surfaced area of all concrete airfield pavements on the post as recorded on the real-property records.

105. Account 613-12, Airfield Pavements—Bituminous—High Type

To this account is charged the cost of maintenance and repair of all high type bituminous airfield payements on the post.

pavements on the post.

a. INCLUDED. The designation Bituminous—high type includes all hot-mix and cold plant-mix bituminous surfaces 2 inches thick or more constructed on rigid bases or substantial flexible bases and bituminous pavements of a comparable class of construction.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all high type bituminous pavements on the post as recorded on the real-property records.

106. Account 613-13, Airfield Pavements—Bituminous—Low Type

To this account is charged the cost of maintenance and repair of all low type bituminous airfield pavements on the post.

a. Included. The designation Bituminous—low type includes bituminous airfield pavements other than those described in account 613-12.

b. Base Data. Square yards is the unit of measure for the total surfaced area of all low type bituminous airfield pavements on the post as recorded on the real-property records.

107. Account 613-14, Airfield Pavements-Miscel-

To this account is charged the cost of maintenance and repair of all miscellaneous airfield pavements

a. Included. The designation Miscellaneous airfield pavements includes gravel, natural-soil, stabilized, and other types than those covered by accounts 613-11, 613-12, and 613-13.

b. Excluded from this account are grassed runways. These are included in account

611-10.

c. Base Data. Square yards is the unit of measure and includes all miscellaneous airfield pavements on the post as recorded on the real-property records.

Section VI. RAILROADS

108. Account 614-00, Railroads

To this account is charged the cost of maintenance and repair of railroads.

a. INCLUDED. The designation Railroads in-

cludes the following:

(1) All running tracks, side tracks, yard tracks, and access tracks of utility railroads owned, leased,

or controlled by the Government.

- (2) Component and incidental features of railroads such as rails, rail accessories, frogs, switches, ties, ballast, roadbed, slopes, ditches, culverts, bridges, trestles, signals, etc.
 b. Excluded. Excluded from railroads are the

following:

- (1) Narrow-gauge trackage serving fortification facilities (par. 208).
 - (2) Trackage for moving targets (par. 195).

(3) Military railroads. These are not a repairs and utilities responsibility (AR 55-650).

(4) Railroad rolling stock and small work cars owned by the Government. Maintenance, repair. and operation of this equipment is not a repairs and utilities responsibility.

(5) Snow removal, ice alleviation and snow

fences (par. 192).

(6) Mowing of grass adjacent to railroads (pars. 93 and 94).

(7) Signs (par. 194).

(8) Maintenance equipment (par. 221).
c. BASE DATA. Linear feet is the unit of measure and includes the total length of railroads in terms of single track (two rails, ties, etc.) as recorded on the real-property records.

Section VII. FIRE PROTECTION

109. General

a. Included. The designation Fire protection includes fire-fighting personnel, fire trucks, hose, ladders, chemicals, fire extinguishers, miscellaneous fire-fighting appliances, outdoor manual fire-alarm systems, fire-fighting clothing, and

other equipment necessary for an effective fireprotection unit.

b. Excluded from fire-protection

accounts are the following:

(1) Automatic-sprinkler systems, standpipe systems, and automatic and manual fire-alarm systems installed in buildings. The maintenance and repair costs of these systems are charged to the applicable building accounts.

(2) Airplane-crash-rescue and fire-fighting trucks and equipment used as such; personnel primarily assigned to airplane-crash rescue and fire fighting or directly related activities defined as

peculiar to AAF.

(3) The cost of establishing and maintaining ground-fire lanes. This is chargeable to the applicable grounds account.

(4) Telephone fire-alarm systems. Maintenance of these systems is not a repairs and utili-

ties responsibility.

- (5) Water-tank trucks normally operated for street-sprinkling and similar purposes and responding to fire calls as emergency units. Maintenance and repair costs of these units are chargeable to account 662-00.
- (6) The value of fire trucks and the equipment permanently attached thereto is retained in inventory accounts 682-20 and 682-30. When such equipment is removed from the post engineers accountability by inventory adjustment or report of survey, the original cost or valuation is debited to account 664-00. When memorandum-receipt equipment is transferred without reimbursement, the original cost or valuation is debited to account 683-40. The contra entry in either case is a credit to the applicable inventory accounts.

110. Account 615-10, Fire Personnel

To this account is charged the entire pay roll of the fire department plus the cost applied to enlisted personnel and prisoners of war assigned to regular tours of duty.

a. INCLUDED. The designation Fire personnel includes all personnel (exception, par. 109b (2)) assigned regular tours of duty as fire fighters and engaged in fire prevention and fire-fighting activities. Included in this account is the labor cost of washing, polishing, and repairing fire trucks drying and repairing fire hose; filling and repairing fire extinguishers; when done by fire personnel during regular tours of duty.

b. BASE DATA. Man hours is the unit of measure and includes the total on-duty hours of fire per-

sonnel.

111. Account 615-20, Fire Trucks

To this account is charged the cost of maintenance and repair and operating supplies of all fire trucks (except crash trucks used as such) and the equipment permanently attached thereto.

a. INCLUDED. The designation Fire trucks includes pumpers, hook-and-ladder, chemical, brush, and combination trucks. Also included are airplane-crash-fire trucks used for fire-fighting purposes other than airplane-crash fires such as protection against fire hazards of petroleum processing, storage, or transportation or where large volumes of water under high pressure are required. All other fire trucks assigned to the post engineer, including the equipment permanently attached to the trucks, are charged to this account.

b. BASE DATA. Number is the unit of measure and represents the total number of fire trucks assigned the post engineer for fire-fighting and training purposes. If this number is decreased during the fiscal year, the decrease in maintenance responsibility is reflected by decreasing the base data and by transferring the pro rata share of maintenance costs applicable to the equipment

disposed of to account 680-30.

112. Account 615-60, Miscellaneous Fire-Fighting Equipment and Services

To this account is charged the cost of maintenance and repair of miscellaneous fire-fighting equipment

a. Included. The designation Miscellaneous fire-fighting equipment and services includes fire hose, hose carts, nozzles, fire extinguishers, ladders, outdoor manual fire-alarm systems, target lamps, water-tank trucks, pumper trailers used exclusively for fire protection, local municipal and service contracts, and all other fire-fighting and fireprevention equipment and service except fire trucks and items listed in paragraph 109b.

b. Base Data. None.

Section VIII. INSECT AND RODENT CONTROL

113. General

The designation Insect and rodent control includes all control measures directed against insects and rodents in and under buildings and on grounds of the military reservation and in areas immediately

adjacent thereto.

a. Included. Insects and rodents include mosquitoes, flies, bedbugs, roaches, ants, ticks, Japanese beetles, grasshoppers, storedproduct pests, termites, rats, gophers, skunks, squirrels, prairie dogs, coyotes, and other insects and mammals that are a hazard to personnel or cause damage to property.

b. Excluded from insect and rodent

control accounts are costs of the following:

(1) Repair of damage to buildings and struc-

tures caused by termites.

(2) Maintenance and repair of screens. These costs are chargeable to applicable buildings and structures accounts.

114. Account 616-10, Insect and Rodent Control-**Buildings and Structures**

a. Included. To this account is charged the cost of disinfesting, fumigating, ratproofing, baiting, trapping, and all other control measures in and under buildings and structures necessary to protect buildings, structures, occupants, and contents from insects and rodents.

b. BASE DATA. Square feet is the unit of measure and includes the total floor area of all buildings and structures on the post as recorded on the realproperty record regardless of whether or not control measures have been taken in any or all buildings and structures. It is equal to the total base data reported under accounts 610-11 through 610-50.

115. Account 616–20, Insect and Rodent Control— Grounds

a. General. To this account is charged the cost of all pest-control measures on the post as well as immediately adjacent areas necessary to suppress insects and rodents (exception, control measures in and under buildings and structures).

b. BASE DATA. Acres is the unit of measure and includes the total acreage of improved grounds and other post areas on the post as reported under accounts 611-10 and 611-20 regardless of whether or not control measures have been taken on any or

Section IX. WATER SYSTEMS

116. General

all of this acreage.

Parts of water systems located outside the main reservation are considered a component part of the post water system, not as an offpost facility. If the facility supplies water to more than one post, all costs applicable to the facility are recorded and reported by the post having operation and maintenance responsibility.

The designation Water systems a. Included.

includes the following:

(1) Government-owned or operated sources of water supply such as wells, cisterns, springs, impounding reservoirs, etc. for the collection of water.

(2) Purchased water.

(3) All conduits, supply mains, valves, hydrants, exterior drinking fountains, meters, services, and equipment for measurement, control, and distribution of domestic, fire-fighting, and irrigation water from the source or point of receipt by the Government to the building lines.

(4) All plants, functional structures, and equipment for pumping, treatment, and storage of water such as well pumps, booster pumps, chlorinators, chemical feeders, coagulation tanks, filters, clear

wells, reservoirs, and elevated tanks.

b. Excluded. Excluded from water systems are the following:

(1) Pumps, treatment equipment, and connecting piping in boiler plants and laundries (par. 150). (2) Water piping inside buildings and installed

plumbing fixtures (par. 63a (3)).

(3) Structural features of buildings housing water pumping and filtration equipment (par. 63a).



117. Account 620-10, Water Distribution Mains and Services

To this account is charged the cost of maintenance, repair, and operation of water-distribution mains and services.

a. Included. The designation Water-distribution mains and services includes the following:

- (1) All conduits, supply mains, valves, hydrants, exterior drinking fountains, and meters for the transportation, distribution, and control of water.
 - (2) Ground and elevated storage tanks.

(3) Service pipes from mains to the building lines.

(4) Chlorinators, chemical feeders, and small treatment devices, such as aerators not included in pumping or filtration plants.

(5) All sources of water supply such as springs, artesian wells, collection systems, impounding reservoirs, and the like which do not require pumping or filtration of the water produced.

b. Excluded from this account are sources of water supply such as wells, cisterns, impounding reservoirs, piping, storage facilities, controls, meters, chlorinators, chemical feeders, and clear wells which are a part of water-pumping or filtration plants (pars. 118 and 121).

c. Base Data. Linear feet is the unit of measure and includes the total length of all water mains, laterals, and service lines from point of receipt or production up to the building lines as

recorded on the real-property records.

118. Water-Pumping Plants

Accounts applicable to water-pumping plants are described in paragraphs 119 and 120.

a. INCLUDED. The designation Water-pumping

plants includes the following:

- (1) Wells, cisterns, springs, and wet wells from which water is pumped, including well screens and
- (2) Well and booster pumps, including motors

and auxiliary engines.

(3) Interconnecting piping, valves, and pump controls, together with chlorinators and chemical feeders located in the pumping stations.

b. Excluded from this account are

the following:

- (1) Wash water pumps at filtration plants (par. 121).
- (2) Circulating pumps, chlorinators, and chemical feeders at swimming pools (par. 124).

119. Account 620-31, Water-Pumping Plants-Op-

To this account is charged the cost of operation of water-pumping plants, including automatically operated plants.

a. INCLUDED. Included in this account are the following:

(1) Salaries of personnel, including supervisors,

assigned to operation of water-pumping plants. If an operator is assigned to two or more plants which are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.

(2) Labor to perform first and second echelon preventive maintenance, inspection, and services.

(3) Operating supplies such as chemicals, lubri-

cants, wiping rags, and the like.

b. Excluded. Excluded from this account are the following:

(1) Power and fuel consumed.

(2) All elements of maintenance and repair

described in paragraph 120.

c. BASE DATA. 1000 gallons is the unit of measure and includes total amounts of water delivered for consumption regardless of the number of times the water is pumped or whether only a part of it is pumped. Reporting is expressed in 1000-gallon units accumulative for the fiscal year to date.

120. Account 620-32, Water-Pumping Plants - Maintenance and Repair

To this account is charged the cost of maintenance and repair of water-pumping plants.

a. Included in this account are

the following:

(1) Materials and repair parts used to effect all

echelons of repairs.

(2) Labor for performing third and higher echelons of maintenance and repair when done by other than operator attendants during their operating shift.

(3) Replacement of defective units of equipment

with comparable units.

- b. Excluded. Excluded from this account are all elements of operation described in paragraph
- c. Base Data. 1000 gallons is the unit of measure and includes the total amount of water delivered for consumption regardless of the number of times the water is pumped or whether only a part of it is pumped. Reporting is expressed in 1000-gallon units accumulative for the fiscal year to date.

121. Water-Filtration Plants

Accounts applicable to water-filtration plants are described in paragraphs 122 and 123.

a. Included. The designation Water-filtration

plants includes the following:

(1) Rapid sand filtration plants, lime softening plants, zeolite softening plants, and pressure filter plants treating all or a major portion of the water supply.

(2) Impounding and storage reservoirs, tanks for raw and wash water, and clear wells for

finished water.

(3) Functional structures, interconnecting piping, and equipment such as chemical feeds, chlorinators, mixers, wash water pumps, floccu-

lators, and all their appurtenances.

b. EXCLUDED. Excluded from water-filtration plants are filtration or treatment plants treating a minor portion of the water supply for special purposes such as for mess halls and swimming pools (par. 124).

122. Account 620-41, Water-Filtration Plants—Operation

To this account is charged the cost of operation of water-filtration plants.

a. Included in this account are

the following:

(1) Salaries of personnel, including supervisors, assigned to operation of water-filtration plants. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to applicable accounts.

(2) Labor to perform first and second echelon preventive maintenance, inspection, and services.

(3) Operating supplies such as chemicals, lubri-

cants, wiping rags, and the like.

b. Excluded. Excluded from this account are

the following:

(1) Power and fuel consumed.

(2) All elements of maintenance and repair

described in paragraph 123.

c. Base Data. 1000 gallons is the unit of measure and includes the total quantity of water delivered by the plant for consumption during the current fiscal year to date, expressed in 1000-gallon units.

123. Account 620–42, Water-Filtration Plants— Maintenance and Repair

To this account is charged the cost of maintenance and repair of water-filtration plants.

a. Included in this account are the

following:

(1) Materials and repair parts used to effect all

echelons of repairs.

- (2) Labor for performing third and higher echelons of maintenance and repair when done by other than operator attendants during their operating shift.
- (3) Replacement of defective units of equipment with comparable units.

b. Excluded. Excluded from this account are all elements of operation described in paragraph

122.

c. Base Data. 1000 gallons is the unit of measure and includes the total quantity of water delivered by the plant for consumption during the current fiscal year to date, expressed in 1000-gallon units.

124. Account 620-45, Miscellaneous Water Treatment

To this account is charged the maintenance, repair, and operation of miscellaneous water treatment.

a. INCLUDED. The designation Miscellaneous water treatment includes the following:

(1) Swimming-pool water-pumping and treat-

ment equipment.

(2) Special-purpose treatment equipment, such as units for treating the water for mess halls and laundries unless chargeable to boiler plants.

(3) The cost of hauling water.

- b. EXCLUDED. Excluded from this account are chlorination, aeration, and treatment for control of scale and corrosion. These costs are chargeable to water filtration plants, water-pumping plants, or water-distribution mains and services as applicable.
 - c. BASE DATA. None.

125. Account 620-50, Purchased Water

To this account is charged the cost of purchased water.

a. Included. The designation Purchased water includes water purchased under utilities contracts. It reflects the net contract price of water received at the station (par. 30). When deductions are made on utilities bills and such deductions represent recoupment of connection charges pursuant to water contracts, this account is charged with the net contract cost of purchased water before deducting the credit for refund of connection charges.

b. Base Data. 1000 gallons is the unit of measure and includes the total quantity of water purchased to date in the current fiscal year,

expressed in 1000-gallon units.

Section X. SEWER SYSTEMS

126. General

Parts of sewer systems located outside the main reservation are considered a component part of the post sewer system, not as an offpost facility. If the facility serves more than one post, all costs applicable to the facility are recorded and reported by the post having operation and maintenance responsibility.

a. Included in the designation Sewer

systems are the following:

(1) All Government-owned or operated facilities for collection, transportation, pumping, treatment, and disposition of sanitary, storm, and combined sewage.

(2) Purchased sewage disposal.

- (3) Plants and equipment such as pumping stations and appurtenances, force mains, sewer mains, building sewers up to the building line, manholes, sewage-treatment plants and pertinent equipment, septic tanks, tile effluent fields, outfall sewers, and storm sewers insofar as the sewage is piped including catch basins and pumping equipment.
- b. Excluded from sewer systems are the following:
 - (1) Culverts, open ditches, underdrains, and

subsurface field drains for collection of surface and ground water. These facilities are included under roads, railroads, grounds and the like to which they are accessory.

(2) Structural features of buildings housing sewage pumping and treatment equipment (par. 63a).

127. Account 621-10, Sanitary Sewers

To this account is charged the cost of maintenance, repair, and operation of sanitary sewers.

- a. INCLUDED. Included in the designation Sanitary sewers are the following:
- (1) All facilities and parts of the sewer system for the collecting and transporting sanitary and combined sewage.
 - (2) Building sewers from the building lines.
- b. Excluded. Excluded from this account are the following:
- (1) Sewers and piping within and connecting the units of a pumping or a treatment plant (pars. 129 and 130).
- (2) Sewers, manholes, catch basins, and the like used exclusively for collection and transportation of surface, storm, and other waste water (par. 128).
- c. Base Data. Linear feet is the unit of measure and includes the total linear feet of all sanitary and combined sewers and building sewers up to the building line as recorded on the real-property records.

128. Account 621-30, Storm Sewers

To this account is charged the cost of maintenance, repair, and operation of storm sewers.

a. INCLUDED. The designation Storm sewers includes catch basins, inlets, sewers, manholes, pumping stations, pumping equipment, controls, force mains, and outfall sewers for the collection, transportation, and disposal of surface, storm, and other waste water drained to such facilities.

b. Base Data. Linear feet is the unit of measure and includes the total linear feet of all storm sewers and inlet connections from point of collection to point of disposal as recorded on the real-property records.

129. Account 621–40, Sewage-Pumping Plants— Operation, Maintenance, and Repair

To this account is charged the cost of maintenance, repair, and operation of sewage-pumping plants.

a. INCLUDED. Included in the designation Sewage-pumping plants are sanitary and combined sewage-pumping stations together with pumps, motors, auxiliary engines, control equipment, trash racks, functional structures, and piping within the station and connecting the various parts thereof.

b. Excluded. Excluded from this account are the following:

(1) Pumping stations used exclusively for disposal of surface or storm water (par. 128).

(2) Pumps and appurtenances adjacent to or a part of a sewage-treatment plant (par. 130).

(3) Power and fuel consumed.

.c. Base Data. Number of stations is the unit of measure and includes the total number of sewage-pumping stations regardless of the number of pumps located in a pumping station.

130. Sewage-Treatment Plants

The accounts applicable to sewage-treatment plants are described in paragraphs 131 and 132.

a. Included. The designation Sewage-treatment

plants includes the following:

(1) All facilities for treatment of sanitary and combined sewage such as screens, settling tanks, aeration tanks, filters, sludge-digestion tanks, drying beds, lagoons, and the like, together with all pumps, motors, and controls adjacent to or a part of a sewage-treatment plant.

(2) Sewers and piping within and connecting

the units of a sewage-treatment plant.

b. Excluded from sewage-treatment plants are small treatment units not regularly attended such as septic tanks, dry wells, cesspools, subsurface-tile leaching systems, and digging, filling, and moving pit latrines, etc. (par. 133).

131. Account 621-51, Sewage-treatment Plants—Operation

To this account is charged the costs of operation of sewage-treatment plants.

a. INCLUDED. Included in this account are the

ollowing

(1) Salaries of personnel, including supervisors, assigned to operation of sewage-treatment plants. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to applicable accounts.

(2) Labor to perform first and second echelon preventive maintenance, inspections, and services.

(3) Operating supplies such as chemicals, lubricants, wiping rags, etc.

b. Excluded from this account are the following:

(1) Power and fuel consumed.

(2) All elements of maintenance and repair

described in paragraph 132.

c. Base Data. 1000 gallons is the unit of measure and includes the total quantity of sewage treated to date in the current fiscal year, expressed in 1000-gallon units.

132. Account 621-52, Sewage-Treatment Plants— Maintenance and Repair

To this account is charged the cost of maintenance and repair of sewage-treatment plants.

a. Included in this account are the following:

(1) Materials and repair parts used for all

echelons of repairs.

(2) Labor for performing third and higher echelons of maintenance and repair when done by other than operator attendants during their operating shift.

(3) Replacements of units of equipment with

comparable units.

b. Excluded. Excluded from this account are all elements of operation described in paragraph 131.

c. Base Data. 1000 gallons is the unit of measure and includes the total quantity of sewage treated in the sewage-treatment plant in the current fiscal year to date, expressed in 1000-gallon units.

133. Account 621–60, Miscellaneous Sewage Disposal

To this account is charged all costs applicable to miscellaneous sewage disposal. It reflects the net contract price of all purchased sewage disposal (par. 30). When deductions representing recoupment of connection charges pursuant to sewage-disposal contracts are made on utility bills, this account is charged with the net contract cost of the purchased sewage disposal before credits for refund of connection charges are deducted.

a. Included in the designation Mis-

cellaneous sewage disposal are the following:

(1) Costs of sewage disposal purchased under

contract or otherwise.

(2) Operation and maintenance of small treatment plants such as septic tanks, dry wells, cesspools, subsurface filters, and tile leaching systems not requiring regular attendance.

(3) Digging and filling in latrine pits and mov-

ing pit latrines.

(4) Collection and disposal of excreta from bucket latrines.

b. BASE DATA. None.

Section XI. ELECTRIC SYSTEMS

134. General

- a. INCLUDED. The designation Electric systems includes the following:
 - (1) Generation of electric energy.

(2) Electric energy purchased under contract

or from another government agency.

- (3) Distribution from generators or from delivery point to all points of utilization on the station.
- (4) Equipment and structural elements such as generators including prime movers, indoor and outdoor substations, voltage regulators, switching stations, switch gear, distribution transformers, poles, switches, lightning arrestors, conductors, insulators, cross arms, racks, brackets,

meters, exterior-lighting circuits and fixtures, manholes, cables, conduits, potheads, etc., necessary for generation and distribution of current.

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b. Excluded from electric systems

are the following:

(1) Electric wiring from the switching device or meter within buildings and structures (par. 63a (3)).

(2) Structural features of buildings housing electric generating and substation equipment

(par. 63a).

(3) Electric equipment at utilization points such as cooking equipment, space heaters, motors, lamps, portable generators, and standby generators designed to serve a small portion of the energy required.

(4) Fire-alarm reporting systems (par. 109b

(5) Airfield night-lighting systems.

135. Electric Generating Plants

Accounts applicable to electric generating plants are described in paragraphs 136 and 137.

a. INCLUDED. The designation Electric generat-

ing plants includes the following:

(1) All permanently installed, government-maintained, generating plants designed as the primary source of electric energy and standby plants capable of furnishing a substantial part of the electrical energy required on the post.

(2) Prime movers, such as internal-combustion engines and steam engines, together with the necessary auxiliary equipment, when used to drive

the electric generating plant.

b. EXCLUDED. Excluded from electric generating plants are the following:

(1) Portable units for general service (par. 221).

(2) Standby units, including permanently placed portable units, for specific service to heating plants, water and sewage pumping plants, hospital operating rooms, etc. Maintenance and repair costs of these units are chargeable to the applicable plant or building accounts.

136. Account 622-11, Electric Generating Plants— Operation

To this account is charged the cost of operating electric generating plants.

a. Included in this account are the

following:

- (1) Salaries of personnel, including supervisors, assigned to operation of electric generating plants. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.
- (2) Labor to perform first and second echelon preventive maintenance, inspection, and services.
- (3) Operating supplies such as lubricants, wiping rags, etc.

- b. Excluded. Excluded from this account are the following:
 - (1) Fuel and power consumed.
- (2) All elements of maintenance and repair described in paragraph 137.
- c. Base Data. KWH is the unit of measure and includes the total electrical energy generated to date in the current fiscal year.

137. Account 622–12, Electric Generating Plants— Maintenance and Repair

To this account is charged the cost of maintenance and repair of electric generating plants.

- a. Included in this account are the following:
- (1) Materials and repair parts for all echelons of repairs.
- (2) Labor for performing third and higher echelons of maintenance and repair when done by other than operator attendants during their operating shift.
- (3) Replacement of defective units of equipment with comparable units.
- b. Excluded. Excluded from this account are all elements of operation described in paragraph 136.
- c. Base Data. KWH is the unit of measure and includes the total electric energy generated to date in the current fiscal year.

138. Account 622-20, Overhead Electric Distribution Lines and Services

To this account is charged the cost of maintenance and repair of overhead electric distribution lines and services.

- a. Included. The designation Overhead electric distribution lines and services includes the following:
- (1) All overhead lines and services, including Government-maintained lines off the military reservation used to distribute electric energy for power and lighting.
- (2) Items such as poles, guy wires, crossarms, braces, conductors, insulators, lighting arrestors, and pole-top switching equipment.
- (3) Service lines up to and including the switching device or meter of buildings and structures.
- b. Excluded from this account are the following:
- (1) Street-lighting fixtures and brackets (par. 140).
- (2) Distribution and constant-current transformers (par. 141).
- c. Base Data. Linear feet is the unit of measure and includes the total pole-line feet (the sum of the distance between poles) of the overhead electric distribution lines and also includes the length of overhead-service lines to the switching device or meter of buildings and structures as recorded on the real-property records.

139. Account 622-30, Underground Electric Distribution Lines and Services

To this account is charged the cost of maintenance and repair of underground electric distribution lines and services.

- a. INCLUDED. The designation Underground electric distribution lines and services includes the following:
- (1) All underground lines and services including government-maintained lines off the military reservation used to distribute electric energy for power and lighting.
- (2) Manholes, trenches, and vaults including accessory equipment, ducts, conduits, cable, switching equipment, junction boxes and the like used in the distribution of electric energy.
- (3) Underground service lines up to and including the switching device or meter of buildings and structures.
- b. Excluded. Excluded from this account are the following:
- (1) Street-lighting fixtures and brackets (par. 140).
- (2) Distribution and constant-current transformers (par. 141).
- c. Base Data. Linear feet is the unit of measure and includes the total trench feet in the duct system including the length of the underground services to the switching device or meter of buildings or structures as recorded on the real-property records.

140. Account 622-40, Exterior Lighting

To this account is charged the cost of maintenance and repair of exterior lighting.

- a. INCLUDED. The designation Exterior lighting includes the following:
- (1) Lights, accessories and brackets used for flood lighting, parking-area lighting, storage-yard lighting, street lighting, including street lights attached to buildings, fence or perimeter lighting, protective lighting, classification-yard lighting, and apron floodlighting.
- (2) Those obstruction lights installed on buildings and structures which are energized from the street-lighting or building electrical system.
- b. Excluded. Excluded from this account are the following:
- (1) Those exterior lights on buildings which are for the purpose of lighting entries, platforms, or otherwise providing illumination for the occupants of the building. These are chargeable to the applicable buildings and structures accounts.
- (2) Target lamps of fire-alarm reporting stations (par. 112).
 - (3) Portable lights (par. 221).
- c. Base Data. Number of lights is the unit of measure and includes the total number of lights in the exterior lighting system.

141. Account 622-50, Distribution Transformers

To this account is charged the cost of maintenance and repair of distribution transformers.

a. Included. The designation Distribution

transformers includes the following:

(1) All constant-potential and constant-current transformers connected to and operating as a part of the overhead and underground distribution

(2) All transformers installed on poles, in vaults, warehouses, manholes, on pads, etc., in-

cluding the transformer fuses.

b. Excluded. Excluded from this account are power transformers in main supply substations

(par. 142).

c. BASE DATA. KVA capacity is the unit of measure and includes the sum of the KVA ratings of all transformers operating on the distribution systems as recorded on the real-property records.

142. Account 622-60, Substations

If the serving utility owns the substation or if the post is supplied direct from the system of the serving utility without voltage transformation, no costs or base data are recorded or reported under this account. The cost of maintenance and repair of switching or regulating facilities at the point of connection is charged to the overhead or underground distribution system as applicable. To this account is charged the cost of maintenance and repair of substations.

a. INCLUDED. The designation Substations includes those Government-maintained assemblies of transformers, regulators, switching or regulating facilities, and auxiliary equipment through which electric energy is passed for the purpose of modifying its characteristics before distribution on the

post.

b. Excluded from this account are transformers connected to and operating as a part of the electric distribution system (par. 141).

c. Base Data. KVA capacity is the unit of measure and includes the sum of the name plate KVA ratings of active transformers in substation. Any standby transformers in the substation are not included in the base data.

143. Account 622-70, Purchased Electric Energy

To this account is charged the cost of all electric

energy received for use on the station.

a. INCLUDED. The designation Purchased electric energy includes all electric energy purchased under contract or by purchase orders. This account reflects the net contract price of electric energy used at the station. When deductions are made on utility bills representing recoupment of connection charges pursuant to electrical contracts, this account is charged with the net contract cost of electric energy before deducting credits for refund of connection charges.

b. BASE DATA. KWH is the unit of measure

and includes the total KWH of electric energy purchased to date in the current fiscal year for use on the station.

Section XII. GAS SYSTEMS

144. General

a. Included. The designation Gas systems includes the following:

(1) The generation of gas, such as butane and

propane.

(2) Purchased gas, including bottled gas.

(3) Distribution from points of generation or delivery to government up to the building lines

or points of utilization on the station.

(4) Plants and equipment such as gas-generating plants, access and distribution lines, regulators, valves, drips, meters, and all other appurtenances and equipment used for generation and distribution of gas.

b. Excluded. Excluded from gas systems are

the following:

(1) Gas lines within buildings from the building

line (par. 63a (3)).

(2) Structural features of buildings housing gas-generating equipment (par. 63a).

145. Account 623-10, Distribution Mains and Serv-

To this account is charged the cost of maintenance and repair of gas-distribution mains and services.
a. INCLUDED. The designation Distribution

mains and services includes the following:

(1) Government-maintained access and distri-

(2) Regulators, valves, drips, meters, services, and other apparatus and equipment used for the

distribution of gas.

b. Base Data. Linear feet is the unit of measure and includes the total length of transmission, distribution, and access lines up to the building lines as recorded on the real-property records.

146. Gas-Generating Plants

The designation Gas-generating plants includes all appurtenances and equipment necessary to the generation of gas such as propane and butane. The accounts applicable to gas-generating plants are described in paragraphs 147 and 148.

147. Account 623-21, Gas-Generating Plants— Operation

To this account is charged the cost of operation of gas-generating plants including automatically operated plants.

a. Included in this account are the

following:

(1) Salaries of personnel including supervisors, assigned to operation of gas-generating plants. If an operator is assigned to two or more plants TM 5-602 29 Sep 45

and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.

(2) Labor to perform first and second echelon preventive maintenance, inspection, and services.

(3) Operating supplies such as lubricants,

wiping rags, and the like.

b. Excluded from this account are the following:

(1) Power and fuel consumed.

(2) All elements of maintenance and repair de-

scribed in paragraph 148.

c. Base Data. Therms is the unit of measure and includes the quantity of gas produced to date in the current fiscal year.

148. Account 623-22, Gas-Generating Plants-Maintenance and Repair

To this account is charged the cost of maintenance and repair of gas-generating plants including automatically operated plants.

a. Included in this account are the

following:

(1) Materials and repair parts used to effect all

echelons of repairs.

(2) Labor for third and higher echelons of maintenance and repair when done by other than operator attendants during their operation shift.

(3) Replacement of defective units of equipment

- with comparable units.
 b. Excluded. Excluded from this account are all elements of operation described in paragraph 147.
- c. BASE DATA. Therms is the unit of measure and includes the quantity of gas produced to date in the current fiscal year.

149. Account 623-30, Purchased Gas

To this account is charged the cost of all gas

purchased for use on the station.

- The designation Purchased gas a. Included. includes all gas purchased such as natural, manufactured, mixed and liquified petroleum gas, and bottled gas. This account reflects the net contract price of purchased gas used at the station (par. 30). When deductions are made on utilities bills representing recoupment of connection charges pursuant to gas contracts, this account is charged with the net contract cost of purchased gas before credits for refund of connection charges are deducted.
- b. BASE DATA. Therms is the unit of measure and includes the total quantity of gas purchased to date in the current fiscal year. A therm is 100,000 BTU's.

Note. Obtain the BTU content of the gas from copy of the utilities contract on file in the post engineer's office or from the utilities company furnishing gas. The utilities contract specifies the minimum BTU content of the gas Multiply the total which the company must maintain. number of cubic feet of gas consumed during the month by the BTU content, and divide by 100,000. The result is the number of therms.

Example:

BTU content of 1 cubic foot of gas obtained from utilities company=980

Cubic feet of gas used during the month=1,560,000

$$\frac{\text{Number of}}{\text{therms}} = \frac{980 \times 1,560,000}{100,000} = 15,268 \text{ therms}$$

Section XIII. HEATING SYSTEMS

150. General

Accounts applicable to the elements included in heating systems are described in paragraphs 151 through 163. A heating plant rated at 100 hp or more capacity (or equivalent BTU rating) is considered in these accounts as a central heating system. A heating plant supplying a consolidated mess hall with a capacity of 1000 men or more is also considered a central heating system, regardless of its rated capacity.

a. Included. The designation Heating systems

includes the following:

(1) The generation of steam, hot water, and hot air.

(2) Purchase steam.

(3) Transmission from points of origin or de-

livery to the government to the following:

(a) The low-pressure side of a high-pressure system heating the building proper or the branch main take-off at the building wall in a low-pressure

(b) Points of utilization for heating or to connections in case of process equipment for inspections, preventive maintenance, and the like when

done by general heating mechanics.

(4) All pressure-reducing stations, condensate and vacuum pumps, flash tanks, and condensate-

receiving tanks regardless of location.

(5) Equipment and appurtenances such as boilers, feed-water heaters, furnaces, space heaters, water heaters, hot water storage tanks, ranges and ovens (except electric), softeners, pumps, stokers and burners, fans and blowers, instruments and controls, piping and valves, insulation (exclusive of building insulation), breeching, distribution and return lines (exclusive of that included in buildings), and all other permanently installed equipment and appurtenances used in heating systems, plants, and equipment to generate and distribute steam, hot water, and hot air.

b. Excluded. Excluded from heating systems

accounts are the following:

(1) Interior distribution systems and accessory equipment such as piping, radiators, hot-air ducts and grilles (outside the furnace room), and stove pipes and hoods (attached to kitchen ranges), all of which are chargeable to applicable building

Note. Inspection, preventive maintenance, etc. on interior distribution systems and accessory equipment when done by general heating mechanics are chargeable to the applicable heating systems account.

- (2) Units for the treatment of water for special purposes covered in paragraph 124 such as swimming pools, and other uses where the water is not heated.
- (3) Structural features of buildings housing steam, hot-water, and hot-air generating units and accessory equipment such as masonry, smoke stacks, roof jacks, flues, building-lighting systems, and the like (par. 63a).

151. Account 624-30, Purchased Steam

- INCLUDED. The designation Purchased steam includes all steam purchased under utility contracts or from other Government agencies and any other services provided under such contracts.
- b. BASE DATA. 1000 pounds is the unit of measure and includes the total quantity of steam purchased to date in the current fiscal year expressed in units of 1000 pounds.

Note. The cost of maintenance and repair of steam transmission systems is chargeable to the applicable heating-system (hospital, laundry, or plants over 100 h.p.) maintenance and repair accounts even though there may be no heating plants on the post.

152. Hospital Heating Systems

Accounts applicable to hospital heating systems are described in paragraphs 153 and 154.

a. Included. The designation Heating systems-hospital includes all the elements of heating systems outlined in paragraph 150 which apply to the following:

(1) The generation, distribution, and utilization insofar as specified in paragraph 150 of steam and hot water produced by central heating plants serving the hospital area.

(2) Central heating systems at general hospitals which furnish steam and hot water to the entire

b. Excluded from this designation are low-pressure boiler plants, warm-air furnaces, space heaters, and the like used to heat single buildings in a hospital area (par. 161).

153. Account 624-41, Heating Systems—Hospital,

To this account is charged the cost of operating hospital heating systems.

a. Included in this account are the

(1) Salaries of personnel, including supervisors, assigned to operation of hospital heating systems. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.

(2) Labor to perform operation, inspections, preventive maintenance, lubrication, adjustments,

and light repairs when done by general heating mechanics or operator attendants during their operating shift.

(3) Operating supplies such as chemicals, lubricants, wiping rags, and the like.

b. Excluded from this account are

the following:

(1) Fuel and power consumed.

(2) All elements of maintenance and repair

described in paragraph 154.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to hospital heating systems.

Note: Tons of Standard fuel is computed by obtaining the BTU rating of the fuel issued (coal, fuel oil, natural gas, electricity, and so on) from the fuel contract on file in the repairs and utilities office or from the company furnishing the fuel. Multiply the BTU content per unit by the total number of units (tons, gallons, cubic feet, and so on) of fuel consumed and divide the product by 25,000,000, the number BTU's in a ton of standard fuel. The result is the number of tons of standard fuel issued.

(1) Example (if coal is used):

BTU content of 1 pound of coal being used =13,000

Tons coal issued=250

Tons standard $=\frac{250\times2,000\times13,000}{25,000,000} = 260$

(2) Example (if fuel oil is used):

BTU content of 1 gallon of fuel oil being issued = 150,000

Gallons of fuel oil issued=25,000 Tons standard $=\frac{25,000\times150,000}{25,000\times150,000}=150$ fuel issued 25,000,000

(3) Example (if gas is used): BTU content of 1 cubic foot of gas being used = 1.000Cubic feet of gas used=1,000,000

Tons standard $=\frac{1,000,000\times1,000}{25,000,000}=40$ fuel used 25.000.000

(4) Example (if electricity is used): BTU equivalent of 1 KWH=3,410 KWH used=10,000Tons standard $=\frac{10,000\times3,410}{25,000,000}=1.36$

(5) Example (if steam is used):

8 pounds steam is equivalent of 1 pound standard fuel Pounds steam used=1,200,000

Tons standard fuel used = $\frac{1,200,000}{8 \times 2,000} = 75$

154. Account 624–42, Heating Systems—Hospital, Maintenance and Repair

To this account is charged the cost of maintenance and repair of hospital heating systems.

- a. Included in this account are the following:
- (1) Materials and repair parts used for all echelons of repair on hospital heating systems.
- (2) Labor for performing third and higher echelons of maintenance and repair.

(3) Replacement of defective units of equipment

with comparable units.

b. Excluded from this account are all elements of operation described in paragraph

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to hospital heating systems (par. 153c, Note).

155. Laundry Heating Systems

The accounts applicable to laundry heating systems are described in detail in paragraphs 156 and 157. The designation Heating systems—laundry includes all the elements of heating systems which apply to generation, distribution, and utilization, so far as specified in paragraph 150, of steam and hot water by central heating plants serving the laundry.

156. Account 624-51, Heating Systems—Laundry Operation

To this account is charged the cost of operating laundry heating systems.

a. INCLUDED. Included in this account are the

following:

(1) Salaries of personnel, including supervisors, assigned to operation of laundry heating systems. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operating-labor costs are equitably distributed to the applicable accounts.

(2) Labor to perform operations, inspections, preventive maintenance, lubrication, adjustments and light repairs done by general heating mechanics or operator attendants during their operating shift.

(3) Operating supplies such as chemicals, lub-

ricants, wiping rags, etc.
b. Excluded. Excluded from this account are the following:

(1) Fuel and power consumed.

(2) All elements of maintenance and repair de-

scribed in paragraph 157.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to laundry heating systems (par. 153c, Note).

157. Account 624-52, Heating Systems—Laundry, Maintenance and Repair

To this account is charged the cost of maintenance and repair of laundry heating systems.

a. INCLUDED. Included in this account are the

following:

(1) Materials and repair parts used for all echelons of repair on laundry heating systems.

(2) Labor for performing third and higher echelons of maintenance and repair.

(3) Replacement of defective units of equipment with comparable units.

b. Excluded from this account are

all elements of operation described in paragraph

c. BASE DATA. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to laundry heating systems (par. 153c. Note).

158. Other Heating Systems—100 Hp and Over

Accounts applicable to other heating systems, 100 hp and over are described in detail in paragraphs 159 and 160. The designation Heating systemsother, 100 hp and over includes all elements of heating systems as outlined in paragraph 150 which apply to following:

a. Generation, distribution, and utilization (so far as specified in paragraph 150) of steam, hot water, and hot air produced by central heating plants serving facilities other than hospitals and

laundries.

b. A central heating system at a station other than a general hospital which supplies steam and hot water to other areas on the post in addition to the hospital area or the laundry is classified in accordance with major usage.

159. Account 624-61, Heating Systems—Other, 100 Hp and Over—Operation

To this account is charged the cost of operating other heating systems, 100 hp and over.

a. Included. Included in this account are the

- (1) Salaries of personnel including supervisors assigned to the operation of heating systemsother, 100 hp and over. If an operator is assigned to two or more plants and such plants are included in more than one operation account, the operatinglabor costs are equitably distributed to applicable accounts.
- (2) Labor to perform operations, inspections, preventive maintenance, lubrication, adjustments, and light repairs when done by general heating mechanics or operator attendants during their operating shift.

(3) Operating supplies such as chemicals, lub-

ricants, wiping rags, and the like.

b. Excluded from this account are the following:

(1) Fuel and power consumed.

(2) All elements of maintenance and repair

described in paragraph 160.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to heating systems of 100 hp and over other than hospital and laundry (par. 153c, Note).

160. Account 624-62, Heating Systems-Other, 100 Hp and Over-Maintenance and Repair

To this account is charged the cost of maintenance and repair of other heating systems-100 hp and over.

a. Included in this account are the following:

(1) Materials and repair parts used to effect all echelons of repair on other heating systems—100 hp and over.

(2) Labor for performing third and higher

echelons of maintenance and repair.

(3) Replacement of defective units of equipment with comparable units.

b. Excluded. Excluded from this account are all elements of operation described in para-

graph 159.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to heating systems of 100 hp and over other than hospital and laundry (par. 153c, Note).

161. Other Heating Systems—Less than 100 Hp

Accounts applicable to other heating systems, less than 100 hp are described in paragraphs 162 and 163. The designation Heating systems—other, less than 100 hp includes all the elements of heating systems which apply to generation, distribution, and utilization (insofar as specified in paragraph 150) of steam, hot water, and hot air produced by plants and heat generating units not under the classification of central heating systems. Included are low-pressure boiler plants, small high-pressure boilers, warm-air furnaces, space heaters, ranges and ovens (except electric) (par. 184), hotwater heaters, burners for mess equipment, and the like used to supply heat and hot water.

162. Account 624-71, Heating Systems—Other, Less than 100 Hp—Operation

To this account is charged the cost of operating other heating systems—less than 100 hp.

a. INCLUDED. Included in this account are the

following:

(1) Salaries of personnel including supervisors assigned to the operation of other heating systems—less than 100 hp. If an operator is assigned to two or more plants and such plants are included in more than one operation account, operating-labor costs are equitably distributed to applicable accounts.

(2) Labor to perform operations, inspections, preventive maintenance, lubrication, adjustments, and light repairs when done by general heating mechanics or operator attendants during their

operating shift.

(3) Operating supplies such as chemicals, lubri-

cants, wiping rags, and the like.

b. Excluded. Excluded from this account are the following:

(1) Fuel and power consumed.

(2) All elements of maintenance and repair

described in paragraph 163.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel

issued to date in the current fiscal year to other heating systems—less than 100 hp (par. 153c, Note).

163. Account 624-72, Heating Systems—Other, Less than 100 Hp—Maintenance and Repair

To this account is charged the cost of maintenance and repair of other heating systems, less than 100 hp.

a. Included in this account are the

following:

(1) Materials and repair parts used for all echelons of repair on other heating systems—less than 100 hp.

(2) Labor for performing third and higher eche-

lons of maintenance and repair.

(3) Replacement of defective units of equip-

ment with comparable units.

b. EXCLUDED. Excluded from this account are all elements of operation described in paragraph 162.

c. Base Data. Tons fuel is the unit of measure and includes the number of tons of standard fuel issued to date in the current fiscal year to other heating systems—less than 100 hp (par. 153c Note).

Section XIV. ICE MANUFACTURING, REFRIGERATION, AND AIR CONDITIONING

164. Account 625–00, Ice Manufacturing and Warehouse Cold Storage Plants — Operation, Maintenance, and Repair

To this account is charged the cost of operation, maintenance, and repair of ice-manufacturing and warehouse cold-storage plants.

a. INCLUDED. The designation Ice-manufacturing and warehouse cold-storage plants includes the

following:

(1) All ice manufacturing plants having a capacity of more than 3 tons of ice per 24 hours.

(2) All cold-storage plants including prefabricated refrigerators used to store products before delivery to the using service.

(3) Cabinet features such as insulation, refrigerator doors, meat racks, etc., of prefabricated refrigerators used as warchouse cold-storage plants.

b. Excluded. Excluded from this account are

the following:

(1) Small automatic ice-manufacturing plants with a capacity of 3 tons or less of ice per 24 hours (par. 165).

(2) Built-in, prefabricated, and miscellaneous refrigerators used for other than cold-storage

plants (par. 165).

(3) Building structural features of ice-manufacturing plants and built-in refrigerator spaces used as warehouse cold-storage plants, such as masonry, room or ice-tank insulation, refrigerator doors, meat tracks, scales, water supply, drains, lighting systems, etc. These are included under the applicable building account.

(4) Fuel and power consumed.

c. BASE DATA. Hp capacity is the unit of measure and is the summation of the compressormotor name plate horsepower rating for all installed refrigeration compressors in the ice manufacturing and warehouse cold storage plants.

165. Account 626-00, Miscellaneous Refrigeration and Air-Conditioning Systems

To this account is charged the cost of operation. maintenance, and repair of miscellaneous refrigeration and air-conditioning systems.

a. Included. The designation Miscellaneous refrigeration and air-conditioning systems includes

the following:

(1) Small automatic ice manufacturing plants with a capacity of 3 tons or less of ice per 24 hours.

(2) Reach-in and domestic refrigerators of

household and medical type.

(3) Built-in or prefabricated walk-in refrigerators other than those used in warehouse cold

storage plants.

- (4) Mechanical water cooling systems, electric drinking-water coolers, morgue-refrigerating systems, air-conditioning and miscellaneous mechanical-refrigerating systems for hospitals, technical, and other facilities.
- (5) Cabinet features such as insulation, refrigerator doors, meat racks, and the like of prefabricated and miscellaneous refrigerators other than those used in warehouse cold storage plants.

b. Excluded from this designation

are the following:

(1) Refrigeration systems serving ice manufacturing and warehouse cold storage plants

(par. 164)

(2) Building structural features of built-in refrigeration systems, such as masonry, room insulation, refrigerator doors, meat tracks, water supply, drains, lighting systems, etc. These are included in the applicable building accounts.

(3) Nonmechanical iced chests, refrigerators,

and water coolers (par. 184).

(4) Ventilating and evaporative (desert type) cooling systems (par. 63a).

(5) Fuel and power consumed.

c. BASE DATA. Hp capacity is the unit of measure and is the summation of the compressor motor name plate horsepower rating of all installed miscellaneous refrigerating and air-conditioning systems.

Section XV. REFUSE COLLECTION AND DISPOSAL

166. General

a. Included. The designation Refuse collection

and disposal includes the following:

(1) Collection of garbage, trash and debris from which salvage has been removed by the responsible agencies, and the collection of salvable scrap and waste materials (defined in detail in TM 38-505). (2) Purchased garbage and refuse disposal.

(3) Hauling and washing of cans.

(4) Operation, maintenance, and repair of incinerators, operation of sanitary fills, dumps, and

all other disposal methods.

b. Excluded from refuse collection and disposal is the assembling of refuse and salvage at designated pick-up points. When such work is done by repairs and utilities custodial personnel, the cost is charged to account 634-18.

167. Incinerators

Accounts applicable to incinerators are described in paragraphs 168 and 169.

a. Included. The designation Incinerators includes the following:

(1) Self-inclosed furnaces having burning grates. fire boxes, and chimneys, and designed for burning combustible refuse.

(2) Masonry, piping, motors, and other installations, equipment, and appurtenances used in burning refuse in the incinerators.

b. Excluded. Excluded from incinerators are

the following:

(1) Burning pits and open burning areas

(par. 173).

(2) Structural features of buildings housing incinerators and accessory equipment (par. 63a).

168. Account 627-11, Incinerators—Operation

To this account is charged the cost of operating incinerators.

a. Included in this account are the

following:

(1) Salaries of personnel, including supervisors,

assigned to operating shifts.

(2) Labor to perform all echelons of maintenance and repair at incinerators when this work is done by operator attendants during their operating shift.

(3) Operating supplies such as lubricants,

wiping rags, and the like.

b. Excluded. Excluded from this account are the following:

(1) Fuel and power consumed.

(2) All elements of maintenance and repair described in paragraph 169.

(3) Any portion of incineration operators time devoted to collecting refuse or can washing (par. 170).

(4) Operation of burning pits and open burning

areas (par. 173).

c. BASE DATA. Cubic yards is the unit of measure and is the total of all refuse burned in the incinerators. The cubic yardage reported is cumulative for the fiscal year.

169. Account 627-12, Incinerators — Maintenance and Repair

To this account is charged the cost of maintenance and repair of incinerators.

a. Included in this account are the following:

(1) Materials and repair parts used for all

echelons of repairs.

(2) Labor for performing third and higher echelons of maintenance and repairs when done by other than operator attendants during their operating shift.

b. Excluded from this account are all elements of operation described in paragraph

c. Base Data. Cubic yards is the unit of measure and is the total of all refuse burned in the incinerators. The cubic yardage reported is cumulative for the fiscal year.

170. Account 627–20, Refuse Collection and Can

To this account is charged costs applicable to the collection of refuse, salvable scrap, and waste materials and can washing.

a. Included. The designation Refuse collec-

tion and can washing includes the following:

(1) Loading from designated pick-up points the garbage, trash, debris, salvable scrap, and waste materials into suitable vehicles, delivering, and unloading at points of disposal.

(2) Washing and returning garbage cans.

b. Excluded from this account is washing of garbage cans when done at mess halls

by mess personnel.

c. Base Data. Cubic yards is the unit of measure and is the total of all refuse, salvable scrap, and waste materials collected. The cubic yardage reported is cumulative for the fiscal year.

171. Account 627-30, Sanitary Fill

To this account is charged the cost of disposing of refuse by sanitary fill. The designation Sanitary fill is limited to operations outlined in TM 5-634 (when published).

a. Included in this account are the

(1) Salaries of personnel including supervisors

assigned to sanitary-fill operations.

(2) Operating supplies such as equipment fuel, lubricants, and the like.

b. Excluded from this account are

the following:

(1) Any portions of sanitary-fill operators' time devoted to collecting refuse or can washing (par.

(2) Methods of refuse disposal not classified as

sanitary-fill operations.

c. Base Data. Cubic yards is the unit of measure and is the total of all refuse as delivered to the sanitary fill for disposal. The cubic yardage reported is cumulative for the fiscal year.

172. Account 627-40, Purchased Refuse Disposal

To this account is charged the cost of purchased refuse disposal.

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a. Included. The designation Purchased refuse disposal includes all refuse collection and disposal done under contract at a cost to the government.

b. Base Data. None.

173. Account 627-50, Other Disposal Methods

To this account is charged the cost of refuse dis-

posal by other disposal methods.

a. INCLUDED. The designation Other disposal methods includes burning pits, open burning areas, dumps, garbage grinders, and all other methods of disposal not done by incineration, sanitary fill, or contract.

b. Base Data. Cubic yards is the unit of measure and is the total of all refuse disposed of by methods other than sanitary fill, incineration, or contract. The cubic yardage reported is cumulative for the fiscal year.

Section XVI. FUEL OTHER THAN GAS AND MOTOR FUELS

174. General

a. Included. The designation Fuel other than gas and motor fuels includes centrally and locally procured coal, fuel oil, distillate, kerosene, wood, charcoal, and the like issued for cooking, heating, and the production of steam and hot water.

b. Excluded. Excluded from fuel accounts are motor fuels, natural and manufactured gas, liquified petroleum gas, fuel consumed by blow torches, melting pots, weed burners, asphalt or tar kettles, blacksmith forges, and the like. Also excluded is the cost of fuel transferred to other posts or government agencies and to offpost facilities.

175. Account 628-11, Coal Issued

a. Included. To this account is charged the cost of coal, including transportation, issued from storage or delivered direct to points of utilization for cooking, heating, and production of steam and hot water. (See par. 236 for elements included in cost of fuel.)

b. Excluded. Excluded from this account is

the cost of coal sold.

c. Base Data. Tons is the unit of measure and includes the total tons of coal issued from storage or delivered direct to points of utilization to date in the current fiscal year, exclusive of coal sold.

176. Account 628-12, Fuel Oil Issued

a. Included. To this account is charged the cost of all residual oils and distillates issued from storage or delivered direct to points of utilization for cooking, heating, and production of steam and hot water.

b. Base Data. 1000 gallons is the unit of measure and includes all residual oils and distillates issued from storage or delivered direct to points of utilization to date in the current fiscal

year.

177. Account 628-13, Other Fuel Issued

a. INCLUDED. To this account is charged the cost of wood, charcoal, and the like issued from storage or delivered direct to points of utilization for cooking, heating, and the production of steam and hot water.

b. BASE DATA. None.

178. Account 628-21, Coal Storage and Distribution

a. Included. To this account is charged costs of unloading, hauling, storing, and distributing coal including drayage from railheads located off the post.

b. Excluded from this account are

cost of the following:

(1) Maintenance and repair of coal-handling

equipment and storage areas.

(2) Delivery to bins and other points of utilization if such delivery costs are included in the coal contract. Delivery costs are then included in the cost of coal.

c. Base Data. Tons handled is the unit of measure and includes the number of tons delivered by truck (unless cost of delivery is included in the coal contract price) or railroad car direct to bins and other points of utilization plus the number of tons delivered to the stock pile plus the number of tons issued from the stock pile. Thus, it includes the number of tons received (except tonnage delivered to bins and other points of utilization when delivery costs are included in the coal contract price) plus the number of tons issued from the stock pile to date in the current fiscal year.

179. Account 628–22, Fuel Storage and Distribution—Other than Coal

a. INCLUDED. To this account is charged the cost of stacking, unloading, hauling, storing, and distribution of wood, for cooking, heating, and the production of steam and hot water.

b. EXCLUDED. Excluded from this account is the cost of cutting wood and kindling. This is

chargeable to account 634-16.

c. BASE DATA. None.

Section XVII. LIQUID PETROLEUM PRODUCTS STORAGE AND DISPENSING SYSTEMS

180. General

a. Included. The designation Liquid petroleum products storage and dispensing systems includes all permanently installed equipment designed primarily for the storage and dispensing of liquid petroleum products to equipment and containers not attached to the dispensing system, and tanks (exterior to buildings) serving motor test blocks.

b. Excluded from this account are storage tanks and equipment directly connected to oil-fired boilers, furnaces, space heaters, com-

bustion engines, etc.

181. Account 629–10, Aircraft Fuel Storage and Dispensing Systems

a. INCLUDED. To this account is charged the cost of maintenance and repair of hydraulic, mechanical pumping, and other types of permanently installed systems used solely for the storage and dispensing of aircraft fuels.

b. BASE DATA. 1000 gallons capacity is the unit of measure and includes the total capacity of all storage tanks in the system expressed in

units of 1000 gallons.

182. Account 629–20, Gasoline Storage and Dispensing Systems — Other than Aircraft

a. INCLUDED. To this account is charged the cost of maintenance and repair of permanently installed gasoline-motor-fuel storage and dispensing systems of all types used in servicing trucks, armored vehicles, other automotive equipment, etc., excepting aircraft.

b. BASE DATA. 1000 gallons capacity is the unit of measure and includes the total capacity of the storage tanks in the system expressed in

units of 1000 gallons.

183. Account 629—30, Petroleum Products Storage and Dispensing Systems — Other than Gasoline

- a. INCLUDED. To this account is charged the cost of maintenance and repoir of all tanks and accessory equipment used for bulk storage and dispensing of fuel oil, kerosene, diesel oils, lubricating oils, and the like, except gasoline and fuel for aircraft.
- b. Base Data. 1000 gallons capacity is the unit of measure and includes the total capacity of all storage tanks in the system expressed in units of 1000 gallons.

Section XVIII. KITCHEN EQUIPMENT

184. Account 630-00, Installed Kitchen Equipment

To this account is charged the cost of maintenance and repair of installed kitchen equipment, including replacement of defective units with com-

parable units.

a. INCLUDED. The designation Installed kitchen equipment includes power-operated and immovable kitchen and mess-hall equipment such as electric ranges; electric ovens; electric broilers; deep fat fryers; mixers; bains-marie; vegetable steamers; slicing machines; steam jacketed kettles; dishwashers; potato peelers; steam tables; scullery sinks; butcher blocks; coffee urns; coffee makers; toasters; meat, fish and bone cutting machines; dish trucks; ice chests (except mechanical refrigerators); griddles; meat grinders; spray-rinse cabinets; grease intercepters (both inside and outside buildings); kitchen and mess tables and benches; etc.

b. Excluded. Excluded from this account are the following:

(1) Walk-in and reach-in refrigerators (par.

(2) Cooking ranges, ovens and broilers (except electric) (par. 163).

(3) Mess chairs (par. 197).

(4) Burners for mess equipment (par. 161).

c. BASE DATA. None.

Section XIX. OFFPOST FACILITIES

185. General

The designation Offpost facilities includes the minor facilities and installations classified as such in accordance with paragraph 54. Separate ledger accounts are maintained for each minor offpost facility served by or through a main post. For reporting purposes, such accounts are consolidated under applicable accounts 631-10 to 632-20 inclusive.

186. Account 631-10, Offpost Minor Leased Facilities — Maintenance, Repair, and Operation

a. Included. To this account are charged all costs of repairs and utilities (excluding new work) incurred on offpost minor leased facilities. To this account is charged the cost of activities and services such as the following:

(1) Maintenance and repair of buildings, grounds, roads, utilities plants and systems, etc.

(2) Operation of the fire department and utilities

plants and systems.

(3) Purchased utilities services such as electricity, water, gas, etc.

(4) Fuel.

b. BASE DATA. None. Base data of buildings, grounds, roads, utilities plants and systems, and the like located on offpost facilities are not reported under this account nor under the applicable accounts of the main post.

187. Account 631-20, Offpost Minor Leased Facilities — New Work

- a. Included. To this account is charged the cost of all new work (ch. 10) performed on offpost minor leased facilities.
 - b. BASE DATA. None.

188. Account 632–10, Offpost Minor Governmentowned Facilities — Maintenance, Repair, and Operation

a. Included. To this account are charged all costs of repairs and utilities (excluding new work) incurred on offpost minor Government-owned facilities. To this account is charged the cost of activities and services such as the following:

(1) Maintenance and repair of buildings, grounds, roads, utilities plants and systems, etc.

(2) Operation of the fire department and utilities plants and systems.

- (3) Purchased utilities services such as electricity, water, gas, etc.
 - (4) Fuel.
 - b. Base Data. None (par. 186b).

189. Account 632-20, Offpost Minor Governmentowned Facilities — New Work

- a. INCLUDED. To this account is charged the cost of new work (ch. 10) performed on offpost minor Government-owned facilities.
 - b. BASE DATA. None.

Section XX. MISCELLANEOUS ITEMS

190. General

Accounts described in paragraphs 191 through 199 have been established for purposes indicated in the description of each account.

191. Account 634-11, Undistributed Costs

- a. Included. To this account is charged only those costs incurred on work of such nature that a specific account code cannot be determined at the time the work is performed. Postings are made so identification of each item can be made when transfer to the correct account is possible. The balance in this account should be small and should diminish when transfers to applicable accounts are made.
 - b. Base Data. None.

192. Account 634-12, Snow Removal

- a. INCLUDED. To this account is charged the cost of the following:
- (1) Removal of snow from buildings, roads, airfield pavements, grounds, and the like including hauling and disposition.
 - (2) Ice alleviation.
- (3) Erection, maintenance, repair, and removal of snow fences.
- b. Excluded. Excluded from this account is the cost of maintenance and repair of snow removal equipment.
 - c. Base Data. None.

193. Account 634-13, Packing and Crating

- a. INCLUDED. To this account is charged costs of packing and crating when such work is assigned as a repairs and utilities function by War Department directive.
- b. EXCLUDED. Excluded from this account are the costs of the following:
- (1) Packing and crating repairs and utilities warehouse stock to prevent breakage while in stock. This cost is chargeable to account 661-30.

(2) Packing and crating which is chargeable to other than ESA appropriations (par. 238).

c. BASE DATA. None.



194. Account 634—14, Signs — Fabrication and Repair

a. INCLUDED. To this account is charged the cost of fabricating, painting, erecting, moving, and repairing all signs.

b. BASE DATA. None.

195. Account 634-15, Training Aids

a. INCLUDED. To this account is charged the cost of maintenance and repair and fabrication of training aids. The designation Training aids includes the facilities defined as training aids in AR 100-80, except drill fields.

b. BASE DATA. None.

196. Account 634-16, Material Production

a. Included. To this account is charged the cost of producing material by the operation of gravel pits, quarries, saw mills, etc., and the fabrication of articles for stock or immediate use such as valves, nipples, bolts, and the like. Subaccounts are kept for each type of production. Periodically or upon completion of work, the cost of producing material is transferred to applicable work or inventory accounts. In this connection, costs are transferred to inventory accounts when the material produced is taken up on the stock-record cards. Costs remaining in this account after the cost records have been closed for the month are reported under this account.

b. BASE DATA. None.

197. Account 634-17, Furniture and Wall Lockers

a. INCLUDED. To this account is charged the cost of the following:

(1) Maintenance and repair of furniture and

wall lockers.

(2) Fabrication of nonstandard items of furniture.

(3) Fabrication and installation of wall lockers.

b. Base Data. None.

198. Account 634–18, Custodial and Janitorial Services

a. INCLUDED. To this account is charged the cost of maid service in civilian dormitories, janitor work including window washing, and the operation of elevators.

Note. This account is not used where custodial and janitorial services are not repairs and utilities functions and are not financed with repairs and utilities funds.

b. Base Data. Man hours is the unit of measure and includes the total man-hours expended on custodial and janitorial services to date in the current fiscal year.

199. Account 634–19, Elevators—Maintenance and Repair

a. INCLUDED. To this account is charged the cost of maintenance and repair of passenger and freight elevators.

b. Base Data. Number elevators is the unit of measure and includes the total number of passenger and freight elevators on the post.

Section XXI. NEW WORK

200. General

Definitions and illustrations of work classifications are given in chapter 10. New work done on off-post facilities and fortifications is charged to applicable account 631-20, 632-20, or 640-90. The cost of deleting passive protection measures is charged to account 650-00. New work includes the following:

a. Additions, alterations, and deletions required by increased requirement or changes in

the use of facilities.

b. New construction authorized under AR 100-80 for accomplishment by the post engineer.

c. Restorations necessitated by disaster.

Account 635–10, Additions, Alterations, Deletions, and New Construction — Projects \$1000 and Under

a. INCLUDED. To this account is charged the cost of additions, alterations, deletions, and new construction when the estimated cost of individual projects does not exceed \$1000.

b. BASE DATA. None.

202. Account 635–20, Additions, Alterations, and Deletions — Projects Over \$1000

a. INCLUDED. To this account is charged the cost of additions, alterations, and deletions when the estimated cost of individual projects exceeds \$1000. An individual ledger sheet is maintained for each project as prescribed in paragraph 38.

b. BASE DATA. None.

203. Account 635-30, Restorations Necessitated by Disaster.

a. Included. To this account is charged the cost of repair of damage caused by fire, flood,

storm, explosion, and the like.

b. Excluded. Excluded from this account is the cost of repairing damage to real and installed property caused by operational accidents such as collisions, derailments, and the like. Such costs are chargeable to the applicable maintenance and repair accounts.

c. BASE DATA. None.

Section XXII. FORTIFICATIONS

204. General

a. Included. The designation Fortifications includes the following:

(1) Structures such as battery structures, control towers, searchlight towers, and the like.

(2) Narrow-gauge trackage in the fortification area.

(3) Mechanical and power facilities installed in fortification facilities.

b. Excluded from fortifications are all nontactical facilities.

205. Account 640-10, Fortifications—Battery Structures

To this account is charged the cost of maintenance and repair of fortifications' battery structures.

a. Included. The designation Fortifications battery structures includes the following:

(1) All fixed gun batteries including antiaircraft and antimotorboat torpedo batteries.

(2) Gun blocks, aprons, loading platforms, case-

mates, corridors, and magazines.

(3) Latrines, plotting rooms, switchboard rooms, spotting rooms, power rooms, and spaces occupied by lighting, power, heating, dehumidifying, and ventilating systems which are an integral part of the battery structures.

b. BASE DATA. Square feet is the unit of measure and includes the total measurable superficial surface of the gun blocks, aprons, floors, loading platforms, decks, etc., including the floor area

occupied by installed equipment.

206. Account 640-20, Fortifications-Other Struc-

To this account is charged the cost of maintenance and repair of fortification structures other than battery structures.

a. Included. The designation Fortifications—

other structures includes the following:

(1) Plotting rooms, fire-control towers, underground facilities, and magazine storage when separate from batteries structures.

(2) Searchlight structures.

(3) Mine-cable tanks and loading rooms, mine

casemates, and magazines.

(4) All other fortifications structures not otherwise provided for and which are not maintained

by other services.

b. Base Data. Square feet is the unit of measure and includes the total area of all floor surface. Square feet of masts and towers are determined by multiplying the square footage of the base by one-third of the height measured from the base.

207. Account 640-30, Fortifications-Mechanical and Power Facilities

To this account is charged the cost of maintenance and repair of fortifications mechanical and power

- a. Included. The designation Fortifications mechanical and power facilities includes lighting, power, heating, dehumidifying, and ventilating systems and all other equipment installed in fortifications structures.
- b. Excluded from this designation are fire-control equipment, communication sys-

tems, armament and Ordnance Department power equipment and rolling stock.

c. Base Data. None.

208. Account 640-40, Fortifications—Other Facilities

To this account is charged the cost of maintenance and repair of fortification facilities not otherwise accounted for.

- a. Included. The designation Fortifications other facilities includes fortification railroads and other tactical facilities not otherwise accounted
 - b. BASE DATA. None.

209. Account 640-90, Fortifications—New Work

a. Included. To this account is charged the cost of all new work (ch. 10) performed on fortification facilities. An individual ledger sheet is maintained for each project estimated to cost \$200 or more as prescribed in paragraph 38.

b. Base Data. None.

Section XXIII. PASSIVE PROTECTION

210. Account 650-00, Passive Protection

To this account is charged the cost of maintenance and repair of passive protection measures and the removal and eradication of passive protection measures.

a. Included. The designation Passive protection includes the cost of measures taken to conceal and protect military installations, such as dimout, blackout, tonedown painting, camouflage or protective concealment, structural protection, and personnel shelters.

b. Excluded. Excluded from this account are camouflage measures used solely for training pur-

poses (par. 195).

c. BASE DATA. None.

Section XXIV. SHOP OVERHEAD

211. General

a. Included. The designation Shop overhead includes all costs incurred in the operation of post engineer shops that cannot be accurately allocated to specific work orders. It includes cost of items such as the following:

(1) Supervisory labor when such labor is so diverse that it cannot be directly related to

specific work orders.

(2) Supplies such as sandpaper, glue, grease solvents, wiping rags, and the like which are used in the operation of shops but which are not issued to specific jobs in measurable quantities.

(3) Cleaning shops and cleaning and adjusting

shop equipment.

(4) Nonproductive time such as time lost waiting for assignment of work, attending training schools, waiting for transportation, and time lost because of inclement weather.

(5) Awards for suggestions made by shop personnel.

b. Excluded. Excluded from shop overhead accounts are costs of the following:

(1) Maintenance and repair of shop equipment and nonexpendable tools (par. 221).

(2) Work which is not a repairs and utilities

responsibility.

(3) Production such as the fabrication of materials and equipment either for stock or immediate use (par. 196).

212. Account 661-10, Carpenter Shop Overhead

a. Included. To this account is charged the

overhead cost of the carpenter shop.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the carpenter shop, regardless of whether work done is chargeable to carpenter shop overhead or to other accounts. Thus, if all personnel assigned to the carpenter shop work a total of 5,200 man hours in a given month, the base data of account 661–10 is increased by that amount. Man hours expended by personnel of one shop temporarily assigned to another shop are included in the overhead account of the shop to which temporarily assigned.

213. Account 661-20, Paint Shop Overhead

a. Included. To this account is charged the

overhead cost of the paint shop.

b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilian, enlisted personnel, general prisoners, and prisoners of war assigned to the paint shop (par. 212).

214. Account 661-30, Storehouse Overhead

To this account is charged the cost of storehouse overhead.

- a. INCLUDED. In addition to the items enumerated in paragraph 211a, storehouse overhead includes costs of the following:
- (1) Receiving (unloading and counting), storing (stacking and handling), and issuing all repairs and utilities materials and equipment except fuel.

(2) Rewarehousing.(3) Taking inventory.

b. EXCLUDED. Excluded from storehouse overhead is the cost of operating the property section. This is chargeable to account 670-00.

c. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the storehouse (par. 212).

215. Account 661-40, Machine Shop Overhead

- a. INCLUDED. To this account is charged the overhead cost of the machine shop.
- b. BASE DATA. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the machine shop (par. 212).

216. Account 661-50, Electric Shop Overhead

- a. INCLUDED. To this account is charged the overhead cost of the electric shop.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war assigned to the electric shop (par. 212).

217. Account 661–60, Plumbing and Steam-fitting Shop Overhead

- a. Included. To this account is charged the overhead cost of the plumbing and steam-fitting shop.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war, assigned to the plumbing and steam-fitting shop (par. 212).

218. Account 661-70, Sheet-metal and Heatingequipment Shop Overhead

- a. INCLUDED. To this account is charged the overhead cost of the sheet-metal and heating-equipment shop.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war, assigned to the sheet-metal and heating-equipment shop (par. 212).

219. Account 661-80, Other Shops Overhead

To this account is charged the overhead cost of other post engineer shops.

- a. Included in other shops are shops for which specific accounts have not been provided, such as blacksmith shop, refrigeration and airconditioning shop, kitchen-equipment shop, and the like. Subaccounts may be maintained for each shop included in this account, but the aggregate cost and base data are reported under account 661-80.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war, assigned to shops classified as other (par. 212).



220. Account 661-90, General Labor Crew Overhead

- a. INCLUDED. To this account is charged the overhead cost of the general labor crew. Stations not having crews specifically designated or operating as general labor crews do not record or report costs or base data under this account.
- b. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, general prisoners, and prisoners of war regularly assigned to the general labor crew, regardless of whether labor costs are chargeable to general labor-crew overhead or other accounts.

Note. General labor-crew employees reassigned to another post engineer shop or activity are dropped from the daily labor report for the general labor crew and picked up on the daily labor report of the activity or shop to which reassigned.

Section XXV. MAINTENANCE MACHINERY, TOOLS, ETC.

221. Account 662-00, Maintenance Machinery, Tools, Etc. — Maintenance and Repair

To this account is charged the cost of maintenance and repair of machinery, tools, and the like, and of replacing defective or worn out maintenance equipment installed in repairs and utilities shops with comparable units.

- a. INCLUDED. The designation Maintenance machinery, tools, and the like includes repairs and utilities power-operated and power-drawn maintenance equipment, nonexpendable hand tools, and miscellaneous equipment such as the following:
- (1) Special-purpose and special-equipment vehicles (except fire trucks).
- (2) Maintenance equipment installed in repairs and utilities shops.
 - (3) Small tools.
- (4) Miscellaneous portable equipment such as air-circulating desk and wall fans, rotors, lights, air compressors, coal-handling equipment, and the like.
- b. Excluded. Excluded from this account are costs of the following:
- (1) Replacement of complete units of maintenance machinery and tools except maintenance equipment installed in repairs and utilities shops. For replacement of maintenance equipment other than this *installed* equipment, see paragraphs 234 and 235.
- (2) Operator's time, fuel, lubricants, and the like. This is chargeable to the work on which the equipment is engaged.
- (3) Equipment for which other services have the responsibility for maintenance and repair.
 - c. BASE DATA. None.

Section XXVI. SALVAGED AND DESTROYED PROPERTY

222. Account 664–00, Property Salvaged and Destroyed

- a. INCLUDED. To this account is charged the cost or value of the following:
- (1) Expendable and nonexpendable property destroyed or damaged beyond repair while in stock.
- (2) Nonrepairable MR property turned over to the salvage officer.
- b. Excluded. Excluded from this account is the cost or value of the following:
- (1) Excess property turned over to the salvage officer (par. 240).
- (2) Nonrepairable class P property removed from installations.
 - (3) All lost property.
 - c. BASE DATA. None.

Section XXVII. LEAVE OF ABSENCE

223. Account 669—00, Annual and Sick Leave Taken

- a. INCLUDED. To this account is charged the cost of all annual, sick, holiday, and terminal leave taken by post engineer civilian employees. The cost of leave is debited to this account in the period for which leave is paid without regard to the periods in which such leave is earned.
- b. Base Data. Man hours is the unit of measure and is the total hours of leave taken to date in the current fiscal year.

Section XXVIII. POST ENGINEER OFFICE

224. Account 670-00, Post Engineer Office

- a. INCLUDED. To this account is charged the cost of the functions of the post engineer office. Included are the following:
- (1) Salaries of civilian administrative and clerical personnel engaged in general office work, property accounting, cost accounting, preparation of work orders, and the like.
- (2) Salaries of civilian personnel employed as superintendents of maintenance.
- (3) Salaries of civilian personnel engaged in civil, sanitary, electrical, mechanical, and other engineering functions.
- (4) The value as established by paragraph 12 of enlisted personnel and prisoners of war engaged in the activities set forth in paragraphs 224a (1) through (3).
 - (5) Fees of consultants and architect engineers.
- (6) Cost of preparing and reproducing maps, plans, specifications, and estimates.
- (7) Awards for suggestions applicable to repairs and utilities work made by post engineer office personnel.

- b. Excluded. Excluded from this account is the cost of the following:
 - (1) Labor of foreman.

(2) Labor of plant supervisors.

(3) All other costs that are applicable to shop

overhead accounts or other accounts.

c. Special Cases. Some personnel are assigned to work not readily chargeable to specific accounts. Example: An employee responsible for over-all operation of the water and sewage systems is in the same category as a sanitary engineer or general superintendent. Labor cost of such personnel is considered as overhead and chargeable to post engineer office.

d. Base Data. Man hours is the unit of measure and includes the total hours of labor of all employees, including civilians, enlisted personnel, and prisoners of war assigned to the post engineer office or performing work chargeable to this account. Man hours reported are cumulative for

the fiscal year.

Section XXIX. RECONCILIATION ACCOUNTS

225. General

The designation Reconciliation accounts includes accounts 680–10 to 699–60 inclusive. Accounts 680–10 to 686–00 inclusive are debit-balance accounts except that accounts 681–20 and 682–90 may reflect either debit or credit balances. Accounts 695–00 to 699–60 inclusive are credit-balance accounts. The summation of the debit balance accounts must equal the summation of the credit balance accounts. Except for account 699–10, none of these reconciliation accounts has base data.

226. Account 680–10, Total Cost This Fiscal Year to Date — Main Post

The net balance in this account after all postings for the month must equal the summation of balances in accounts 610–11 through 670–00.

a. Debited to this account are the total monthly increments recorded in detail in accounts 610-11 through 670-00 for the main post (par. 396).

b. CREDITED. Credited to this account are the

following:

(1) The closing balance in this account as of the end of the fiscal year (par. 230).

(2) Costs applicable to deleted facilities (par.

228).

(3) Costs applicable to transferred offpost facilities (par. 229).

227. Account 680–20, Total Cost this Fiscal Year to Date — Subposts

The total cost for the fiscal year to date for each subpost is reported under this account on the report for each subpost. Also, the total cost to date for all subposts are reported under this ac-

count on the report for the applicable main post. After all postings have been made for the month, the net balance in this account for main posts must equal the summation of the balances in accounts 610-11 through 670-00 for applicable subposts. Similarly, in the accounts for each subpost the balance in this account must equal the summation of balances in accounts 610-11 through 670-00 for the individual subpost.

a. Debited to this account are the total monthly increments recorded in detail in accounts 610-11 through 670-00 for subposts (par. 39). Account 680-20 is maintained in the accounts for subposts and in the accounts for main

posts to which subposts are attached.

b. CREDITED. Credited to this account are the following:

(1) The closing balance in this account as of the end of the fiscal year (par. 230).

(2) Costs applicable to deleted facilities (par. 228).

(3) Costs applicable to transferred subpost facilities (par. 229).

228. Account 680-30, Total Costs this Fiscal Year to Date — Deleted Facilities

The cost to date for the current fiscal year applicable to deleted facilities is determined by multiplying the unit cost at time of deletion by the number of base-data units deleted. Accounts, except minor offpost facilities, for which no base data is prescribed are not reduced when maintenance responsibility is decreased. Costs applicable to deleted subpost facilities are credited to the applicable cost accounts 610–11 through 670–00 and account 680–20 in the cost records for the subpost. This deletion is also reflected in the applicable main-post reconciliation accounts as a credit to account 680–20 and a debit to account 680–30.

a. Debited to this account are the

following:

(1) The pro rata share of the costs of operation, maintenance, and repair incurred to date in the current fiscal year on facilities such as buildings, roads, utilities systems, and the like which have been demolished or otherwise removed. The corresponding credits are to appropriate accounts 610-11 through 670-00 and account 680-10 or 680-20 as applicable.

(2) The cost of operation, maintenance, repair, and new work incurred to date in the current fiscal year on minor offpost facilities disposed of either by cancellation of lease or as surplus government-owned facilities. The corresponding credits are to the applicable offpost facilities accounts 631-10 through 632-20 and account

680–10.

b. CREDITED. Credited to this account is the closing balance in this account as of the end of the fiscal year (par. 230).

c. Excluded from this account are

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costs incurred on facilities transferred from one account to another following conversion. The pro rata share of costs incurred on such facilities before conversion are computed as prescribed for deleted facilities and transferred to the accounts applicable to the converted facilities.

229. Account 680-40, Total Cost this Fiscal Year to Date—Transferred Facilities

When repairs and utilities functions for offpost facilities and subposts are transferred from one station to another, the transferring station furnishes the receiving station a record of the closing balances of the applicable accounts. This record indicates totals of labor, materials, supplies, and the like as shown on the cost-ledger sheets.

a. Debited to this account are the total costs incurred during the current fiscal year for maintenance, repair, operation, and new work on the following types of facilities when their repairs and utilities functions are transferred to another station without adjustment of funds.

(1) Minor offpost facilities, both Governmentowned and leased. The corresponding credit is to applicable accounts 631-10 through 632-20

and account 680-10.

(2) Subposts. The corresponding credit is to applicable accounts 610-11 through 670-00, account 680-20 for the subpost, and account 680-20 for the main post serving the subpost.

b. CREDITED. Credited to this account is the closing balance in this account as of the end of

the fiscal year (par. 230).

230. Account 681-10, Prior Years' Costs—Feature Accounts

The fiscal year-end transfer of balances to this account from the accounts cited below is done after the submission of cost reports for the period ending 30 June of each fiscal year. Concurrently with this transfer, ledger sheets for accounts 610-11 through 670-00 are closed.

a. Debited to this account are the

following:

(1) The balances as of the close of each fiscal year of accounts 680-10, 680-20, 680-30, and 680-40.

(2) Debit adjustments and items of cost appli-

cable to prior fiscal-year transactions.

b. CREDITED. Credited to this account are credit adjustments applicable to prior fiscal-year transactions.

231. Account 681-20, Prior Years' Costs—Reconciliation Accounts

The fiscal year-end transfer of balances to this account is made after the submission of cost reports covering the period ending 30 June of each fiscal year.

a. Debited to this account are the

following:

(1) The balances as of the close of each fiscal

year in accounts 682-90, 683-20, 683-40, and 636-00.

- (2) Debit balances in reconciliation accounts maintained in the preceding fiscal year but deleted from chart of accounts in chapter 11.
- (3) Debit adjustment entries and items of cost applicable to prior fiscal-year transactions which affect accounts listed in paragraph $231 \ a \ (1)$.
- b. CREDITED. Credited to this account are the following:
- (1) The balances as of the close of each fiscal year in accounts 682-90, 695-00, 699-10, 699-20, 699-30, 699-40, 699-50, and 699-60.
- (2) Credit balances in reconciliation accounts maintained in the preceding fiscal year but deleted from the chart of accounts in chapter 11.
- (3) Credit-adjustment entries and items of cost applicable to prior fiscal-year transactions affecting accounts listed in paragraph 231 b (1).
- c. The fiscal year-end transfer of balances to this account is made after the submission of cost reports covering the period ending 30 June of each fiscal year.

232. Inventories

The designation *Inventories* includes the expendable and nonexpendable property classified in accordance with TM 5-601 (when published) and recorded on stock-record cards. Property on the stock-record cards and picked up in the inventory account is priced as shown in paragraph 17. Inventory-account balances are reconciled quarterly (par. 43 a). Inventory accounts are adjusted for overages and shortages in stock (par. 20). The accounts applicable to inventories are described in paragraphs 233 through 237.

233. Account 682–10, Inventory—Expendable and Class P Property

This account reflects the total cost or value of expendable and class P property recorded on stock-record cards.

a. Debited to this account are the following:

(1) The cost or value of all expendable and class P property taken up on the stock-record cards.

- (2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly reconcilement.
- b. CREDITED. Credited to this account are the following:

(1) The cost or value of all expendable and class P property dropped from stock-record cards.

- (2) Amounts by which total values recorded on the applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.
- c. Excluded. Excluded from this account is the cost or value of heating fuels (par. 236).

234. Account 682–20, Inventory—Accountable MR Property—Other Than Power-Operated Maintenance Equipment

This account reflects the total cost or value of all MR property, other than power-operated and power-drawn maintenance equipment, recorded on the stock-record cards. Maintenance and repair of items retained in this account are recorded as costs under account 662–00, except that such costs for miscellaneous fire-fighting equipment is charged to account 615–60.

a. Debited to this account are the

following:

(1) The cost or value of all MR property, other than power-operated and power-drawn maintenance equipment, taken up on the stock-record cards. These values are retained in this account until the property is removed from post engineer accountability.

(2) Amounts by which total values on applicable stock-record cards are less than the balance in this account as determined by quarterly

reconcilement.

b. CREDITED. Credited to this account are the

following:

(1) The cost or value of accountable MR property, other than power-operated and power-drawn maintenance equipment, when dropped from the stock-record cards by removal from post engineer accountability.

(2) Amounts by which total values on applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.

235. Account 682-30, Inventory—Accountable MR Property—Power-Operated Maintenance Equipment

This account reflects the total cost or value of MR power-operated and power-drawn maintenance equipment recorded on stock-record cards. Maintenance and repair of items retained in this account are recorded as costs under account 662–00, except that such costs for fire trucks are charged to account 615–20.

a. Debited to this account are the

following:

(1) The cost or value of all MR power-operated and power-drawn maintenance equipment taken up on the stock-record cards. These values are retained in this account until the property is removed from post engineer accountability.

(2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly

reconcilement.

b. CREDITED. Credited to this account are

the following:

(1) The cost or value of accountable MR power-operated and power-drawn maintenance equipment when dropped from the stock-record cards by removal from post engineer accountability.

(2) Amounts by which total values recorded on applicable stock-record cards are less than the balance in this account as determined by quarterly reconcilement.

236. Account 682-40, Inventory-Fuel

This account reflects the total cost or value, including transportation, of heating fuels recorded on the stock-record cards.

a. Debited to this account are the

following:

(1) The cost or value including transportation of all heating fuel taken up on the stock-record cards

(2) Amounts by which total values recorded on applicable stock-record cards exceed the balance in this account as determined by quarterly reconcilement.

b. CREDITED. Credited to this account are

the following:

(1) The cost or value, including transportation, of all heating fuels dropped from the stock-record cards.

(2) Amounts by which total values recorded on applicable stock-record cards are less than the balance in this account as determined by quar-

terly reconcilement.

c. EXCLUDED. Excluded from this account is the cost or value of motor fuels, gasoline and fuels consumed by blow torches, melting pots, weed burners, blacksmith forges, and the like, which are carried in account 682–10 if stocked by the post engineer.

237. Account 682-90, Inventory Adjustments

a. General. To this account are recorded contra entries for adjustment to the inventory accounts. The amount of an adjustment is computed on the basis of:

(1) Net shortages or overages on individual

inventory-adjustment reports.

(2) The quarterly reconcilement between the value shown on stock-record cards and the values reflected in the applicable inventory accounts.

b. Debited to this account are the

following:

(1) The cost or value of net shortages on inventory-adjustment reports and reports of survey except when a financial settlement is to be obtained. In such cases, appropriate amounts are debited to applicable accounts receivable.

(2) Amounts by which total values recorded on stock-record cards are less than the balances in the applicable inventory accounts as determined by

quarterly reconcilement.

(3) The closing balance in this account as of the end of the fiscal year when the final amount is a credit balance.

c. CREDITED. Credited to this account are

the following:

(1) The net overages on inventory-adjustment reports.

(2) Amounts by which total values recorded on stock-record cards exceed the balances in the various inventory accounts as determined by quarterly reconcilement.

(3) The closing balance in this account as of the end of the fiscal year when the final amount is a debit balance.

Note. This account may have a debit or credit balance depending on the value of overages compared with the value of shortages.

238. Account 683-10, Accounts Receivable

- a. Debited to this account are the costs of labor, materials, equipment, and nonpersonal services accomplished or furnished by the post engineer to other posts, departments, agencies, or others for which reimbursement is to be obtained, either by billing or by quoting applicable funds on expenditure documents.
- b. CREDITED. Credited to this account are the following:
- (1) Reimbursements received either by check, Standard Form 1080, WD AGO Form 14-104, or by application of appropriate funds on expenditure documents.
- (2) Delinquent accounts when turned over to the service command finance officer for collection.
- c. Subaccounts. Subaccounts are maintained for each debtor for which costs have been incurred. The balances of the subaccounts are consolidated and reported on the monthly cost report as one amount under this account.

239. Account 683-20, Costs Incurred for Others Without Reimbursement

- a. Debited to this account is the cost or value of the following:
- (1) Labor payable from repairs and utilities funds and property issued from repairs and utilities stock when expended on work assigned to repairs and utilities under the combined-shop plan.
- (2) Property issued to other services on the post without reimbursement when such property is used for other than repairs and utilities work.
- (3) Repairs and utilities work done for other post engineers, including the cost or value of all labor and materials used. These costs are reported to and taken up in the applicable accounts of the post for which the work was done.
- (4) Work done in connection with a service command function such as service command schools and training programs.
- (5) All other work by the post engineer which is not a repairs and utilities responsibility and for which reimbursement is not permissible.
- b. Credited to this account is the closing balance as of the end of the fiscal year (par. 231).

240. Account 683-40, Excess Property Transferred

a. Debited to this account is the cost or value of all excess property transferred from post engineer accountability, including excess property transferred to the salvage officer. The contra entries are credits to the applicable inventory accounts.

b. Credited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).
c. Excluded. Excluded from this account is the cost or value of specialized maintenance equipment transferred from post to post to accomplish specific work programs. The value of such equipment is cleared from the cost records by reversing the original entry when the equipment is transferred. If the equipment is received in one fiscal year and transferred in the following fiscal year, account 681-20 is debited for the value of the equipment transferred.

241. Account 684-00, Unexpended Allotments

The balance in this account reflects the amount of repairs and utilities funds unexpended.

a. Debited to this account are the

following:

(1) The amount of allotments received, repairs

and utilities funds only.

- (2) Expenditure refunds, except refunds applicable to completed allotments and recoupment of utilities connection charges.
- (3) Collections affected by WD AGO Form 14-104.
- b. Credited to this account are the following:
- (1) Expenditures of the post's repairs and utilities funds.
- (2) Decreases in allotments of repairs and utilities funds.

242. Account 686-00, Collections

Contra entries for items debited this account are credits to the accounts-receivable account.

a. Debited to this account are the

following:

- (1) Collections classified as appropriation reimbursements or as miscellaneous receipts as defined in TM 14-702.
- (2) Expenditure refunds applicable to completed repairs and utilities allotments. Expenditure refunds applicable to incompleted repairs and utilities allotments are debited to account 684-00.
- b. Credited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

243. Account 695-00, Rentals and Other Revenue

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. Credited to this account are the

following:

(1) All sales of utilities such as electric current, gas, and water, including deductions from post engineer payrolls in payment for such services.

Note. The cost to produce or purchase utilities services as recorded in applicable utilities accounts is not reduced in consideration of the sale of such services.

(2) Deductions from repairs and utilities payrolls for rental of quarters.

(3) Rentals of Government-owned equipment.

(4) Time discounts allowed by vendors and contractors for prompt payment of invoices. The contra entries for time discounts are included in the debits to account 698-10 on liquidation of indebtedness.

244. Account 697-10, Allotments Received-This Fiscal Year to Date

- a. Debited to this account are the following:
- (1) The decreases in repairs and utilities allotments. The contra entries are credits to account 684-00.
- (2) The closing balance in this account as of the end of the fiscal year which is transferred to account 697-20. This balance is transferred after submission of cost reports covering the period ending 30 June of each fiscal year.

b. Credited to this account are allotments of repairs and utilities funds received during the current fiscal year. The contra entries

are debits to account 684-00.

245. Account 697-20, Allotments Received-Prior Fiscal Years

a. Debited to this account are decreases in allotments for the preceding fiscal year. Debits are made to this account only after balances of allotments received for the preceding fiscal year have been transferred to this account.

b. CREDITED. Credited to this account is the closing balance in account 697-10, which is transferred to this account as of the end of each

fiscal year.

246. Accounts Payable

a. These accounts reflect the cost of labor expended and the cost of materials, supplies, equipment, utilities, and other services received as evidenced by WD AGO Forms 5-112 for which advice of payment has not been received and when such items are procured from the following:

(1) Repairs and utilities funds available to the

post.

(2) Other than repairs and utilities funds when reimbursement for accounts receivable are obtained by quoting other appropriate funds on post engineer pay rolls and other expenditure documents.

b. The accounts-payable account balances must reconcile with the accounts payable entries on WD AGO Forms 5-112 in the open-voucher file (par. 43b (2)).

c. The individual accounts payable accounts

are described in paragraphs 247 and 248.

247. Account 698-10, Accounts Payable-Materials, Supplies, and Non-Personal Services

a. Debited to this account are expenditures for materials, supplies, and nonpersonal services as evidenced by appropriate notations on duplicate copies of WD AGO Form 5-112 received from the fiscal office. The contra entries are credits to account 684-00 for amounts paid from post repairs and utilities funds, account 695-00 for deductions of time discounts, and the appropriate subaccounts under account 683-10 for amounts paid from other than repairs and utilities funds. when such funds are quoted on expenditure documents in order to obtain reimbursement.

b. Credited to this account are costs of materials, supplies, equipment, utilities, and other services received as evidenced by WD AGO Forms 5-112, payment for which is made from post repairs and utilities funds and, when applicable, other appropriate funds which are quoted on expenditure documents in order to obtain reimbursement. The contra entries for materials, supplies, and equipment are debits to the applicable inventory accounts, except that items expended immediately upon receipt through certificates of expenditure are debited direct to applicable cost accounts. The contra entry for utilities and other services are debits to the applicable cost accounts.

248. Account 698–20, Accounts Payable—Pay Rolls

a. Debited to this account are total expenditures of funds for the payment of personnel on repairs and utilities pay rolls as evidenced by appropriate notations on duplicate copies of WD AGO Form 5-112 received from the fiscal office. Included in such debits are the following:

(1) Amounts of pay-roll deductions from post engineer personnel for rental of quarters, sale of

utilities, and the like.

(2) Direct payments from other than post repairs and utilities funds when such funds are quoted on expenditure documents in order to obtain reimbursement.

The contra entries are credits to account 684-00 for the amount paid from post repairs and utilities funds; account 695-00 for the amounts deducted from repairs and utilities employees for rental of quarters, sale of utilities, etc.; and account 683-10 for the amount of repairs and utilities personnel labor cost paid from other than repairs and utilities funds.

b. Credited to this account are total costs of labor expended for personnel included on repairs and utilities pay roll. Such costs are evidenced by appropriate information on WD

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AGO Forms 5-101 in conjunction with applicable WD AGO Forms 5-112. The contra entries are debits to the accounts applicable to work performed or account 669-00, as indicated on WD AGO Form 5–101.

249. Costs not Chargeable to Post Repairs and Util-

The accounts applicable to costs not chargeable to post repairs and utilities funds are described in

paragraphs 250 through 255.

a. INCLUDED. To this series of accounts is recorded the value of labor, materials, supplies, equipment, and services received for which post repairs and utilities funds are not charged but for which repairs and utilities funds are applicable.

b. Excluded from this series of accounts are overages disclosed by physical inventory and reconciliation of values on stock-record cards with values in inventory accounts. Such overages are credited to account 682-90.

250. Account 699-10, Costs not Chargeable to Post Repairs and Utilities Funds—Labor

a. Debited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

- b. CREDITED. Credited to this account is the value of labor expended on repairs and utilities work by civilians other than repairs and utilities personnel (when on a nonreimbursable basis), enlisted men, general prisoners, and prisoners of The contra entries are debits to the appropriate cost accounts indicated on WD AGO Forms 5-101.
- c. Base Data. Man hours is the unit of measure and includes the total hours of labor expended on repairs and utilities work by personnel indicated in paragraph 250b to date in the current fiscal year.

251. Account 699-20, Costs not Chargeable to Post Repairs and Utilities Funds—Materials and Supplies

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. CREDITED. Credited to this account are the

following:

(1) The cost or estimated value of materials and supplies including centrally procured items and motor fuels transferred to the post engineer without charge. The contra entries are debits to

the applicable inventory accounts.

(2) The differences between the cost of producing, reclaiming, and reconditioning materials and parts, including parts removed from class P property and the value of like items carried in stock or fair market value if such items have not previously been stocked (pars. 26 and 27b).

252. Account 699-30, Costs not Chargeable to Post Repairs and Utilities Funds-Machinery and Equipment

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. CREDITED. Credited to this account are the

following:

(1) The cost or estimated value of machinery, tools, and equipment including centrally procured items, maintenance machinery, and the like transferred to the post engineer without charge. The contra entries are debits to the applicable inventory accounts.

(2) The inventory value of serviceable class P property removed from facilities and placed in stock. The contra entries are debits to account 682-10 or the applicable cost accounts (par. 25).

253. Account 699-40, Costs not Chargeable to Post Repairs and Utilities Funds—Fuel

a. Debited to this account is the closing balance in this account as of the end of

the fiscal year (par. 231).

b. CREDITED. Credited to this account are the costs, including transportation, of heating fuel (other than motor fuel which is credited to account 699-20) received by the post engineer without charge. The contra entries are debits to account 682-40.

254. Account 699-50, Costs not Chargeable to Post Repairs and Utilities Funds—Other

a. Debited to this account is the closing balance in this account as of the end of the fiscal year (par. 231).

b. Credited to this account are

the following:

(1) The cost or estimated value of work done under contracts administered by service command headquarters and other services (for which accounts have not been provided) received by the post engineer without charge. The contra entries are debits to the applicable cost accounts or inventory accounts.

(2) The value of repairs and utilities work performed by other agencies under the combinedshop plan. The contra entries are debits to the

applicable cost accounts.

255. Account 699-60, Costs not Chargeable to Post Repairs and Utilities Funds—Facilities Received by Transfer

When repairs and utilities for offpost facilities and subposts are transferred, the transferring station furnishes the receiving station a record of the closing balances of the applicable accounts. The record of closing balances indicates the totals for labor, materials, supplies, and the like as shown in the cost records.

a. Debited to this account is the closing balance in this account as of the end of the

fiscal year (par. 231).

b. CREDITED. Credited to this account are the costs of maintenance, repair, operation, and new work incurred in the current fiscal year on minor offpost facilities (both Government-owned and leased) and subposts, when the repairs and

utilities functions at such facilities are assigned to the post engineer by transfer from another without an adjustment of funds. The contra entries are debits to the applicable accounts 631-10, 631-20, 632-10, 632-20, and 680-10 in the case of offposts, and to the applicable accounts 610-11 through 670-00 and account 680-20 in the case of others. in the case of subposts.

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